

# **CIUTI Report**

## **TIGES 21 Survey 2018: T&I Graduate Employment Strategies in the 21st Century**

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## 1. Brief Summary

The TIGES 21 survey was conducted online between 26 March and 30 April 2018. It was implemented with the Lime Survey<sup>1</sup> tool and hosted by the School of Applied Linguistics at the Zurich University of Applied Sciences (ZHAW) in Winterthur, Switzerland. The survey was motivated by the perceived need for T&I education to remain relevant to its stakeholders by producing graduates who both fulfil real-world societal and economic requirements and receive appropriate rewards for doing so in a volatile work market where adaptive expertise plays a major role in longer-term employability. The full questionnaire can be found in the appendix.

The general objective was to address key factors likely to affect graduate employment and working conditions. These comprise advances in technology (machine translation, deep learning, artificial intelligence, etc.), shifts in demand for human T&I services and the growing diversity of roles and work contexts for translators and interpreters. Specifically, the survey was designed to

- identify the current status of stakeholder-relevant T&I education among CIUTI institutes
- ascertain existing strategic responses to technological change, market shifts and evolving settings

in order to establish

- concrete strategic orientation points to help guide CIUTI members forward in curricular development
- a consultation network to share and support good practices for curricular (re-) design and its implementation.

The overall response rate to the survey was 56%, i.e. 27 of the 48 institutions requested to participate. By region, this breaks down into: Europe and West Asia: 21/39 (response rate: 54%); East Asia and Australia: 4/7 (response rate: 57%); North America: 2/2 (response rate: 100%).

The full results of the survey can be found in Section 2 of this report. Here, we restrict ourselves to a very brief overview of the most salient quantitative results.

Respondents were first asked to indicate on a four-point Likert scale the degree (high, medium, low, none) to which the following items posed a challenge to their graduates, currently and in future:

- Pricing and income pressures
- Competition from abroad
- Under-qualified competition
- Technological developments
- Diversity of work contexts
- Diversity of roles
- Range of competences
- Quality demands
- Productivity demands
- Availability demands
- Other

Each response was coded<sup>2</sup> and the results aggregated for each question and item.

Results for translation graduates showed that price and income, followed by productivity, ranked first and second respectively as both current and future challenges. When the results for

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<sup>1</sup> <https://www.limesurvey.org/>

<sup>2</sup> High = 3, medium = 2, low = 1, none or no answer = 0

the current and future challenges were compared and contrasted, the greatest increase in perceived challenges were recorded for technological developments, range of competences, diversity of work context and diversity of roles.

The results for interpreting graduates revealed a different picture. The first three places for both current and future challenges were occupied by price and income, under-qualified competition and availability demands, respectively. The biggest increases between current and future challenges were seen for range of competences, technological developments and competition from abroad, though the latter two still ranked lowest on aggregate amongst all the challenges listed for both current and future challenges.

When asked if measures were in place to meet perceived current challenges, 89% of respondents answered affirmatively. Based on responses by 50% or more of those who responded with "yes" (n = 24), the most frequent curricular measures referred to involved more training in T&I technology, MT pre-editing and/or post-editing, additional T&I directions, writing and revision, T&I entrepreneurship and authentic experiential learning. The most frequent organisational measures were increased student access to T&I technology, and more time and spaces for collaborative learning. When grouped into areas of interest, it is therefore clear that technology, learning scenarios, business skills and languages are the main focal points for meeting current graduate challenges.

The participants were also asked whether their institutions had strategies to address future challenges. 78% answered "yes". Based on 50% or more of the number of those who responded affirmatively (n = 21), the top curricular measures mentioned were training in T&I technology, MT pre-editing and/or post-editing, T&I entrepreneurship, authentic experiential learning, role adaptability, localisation, community interpreting and independent learning. The leading organisation measures were, again, more student access to T&I technology, and more time and spaces for collaborative learning. The focal points thus appear to be broadening slightly compared to those for perceived current challenges: while technology and business skills as well as (authentic, collaborative and independent) learning scenarios are still deemed important, role adaptability and additional T&I forms (localisation, community interpreting) enter the matrix.

This brief summary no more than scratches the surface of the survey results. These are presented in full in the next section.

## 2. Full results of the TIGES 21 survey (March/April 2018)

Response rate: **27/48 (56%)**

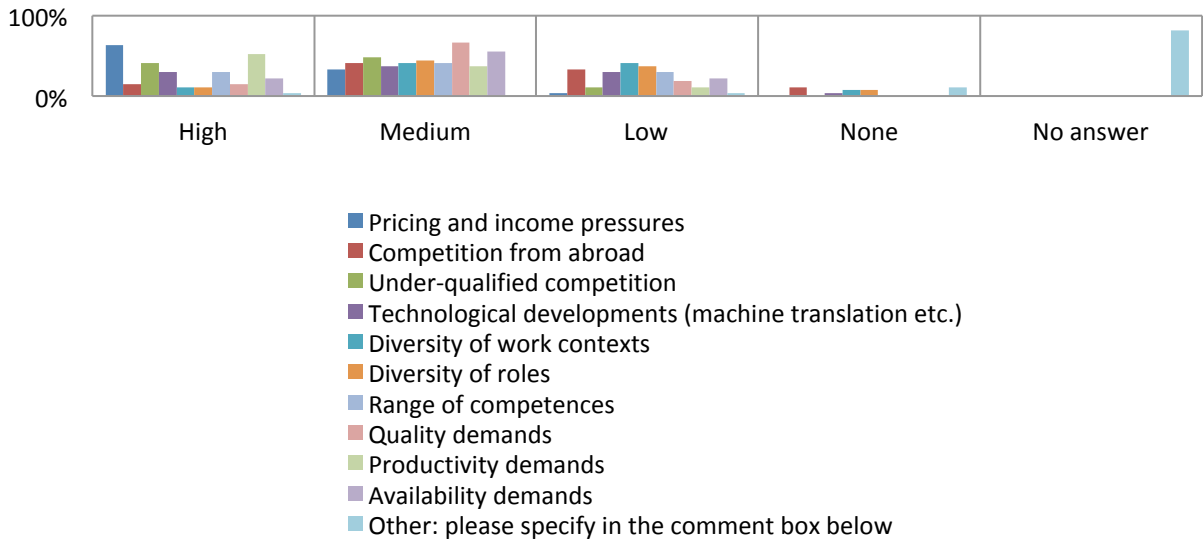
### Part 1

1. Please indicate the degree of the **current employment challenge** posed to your **translation graduates** by:

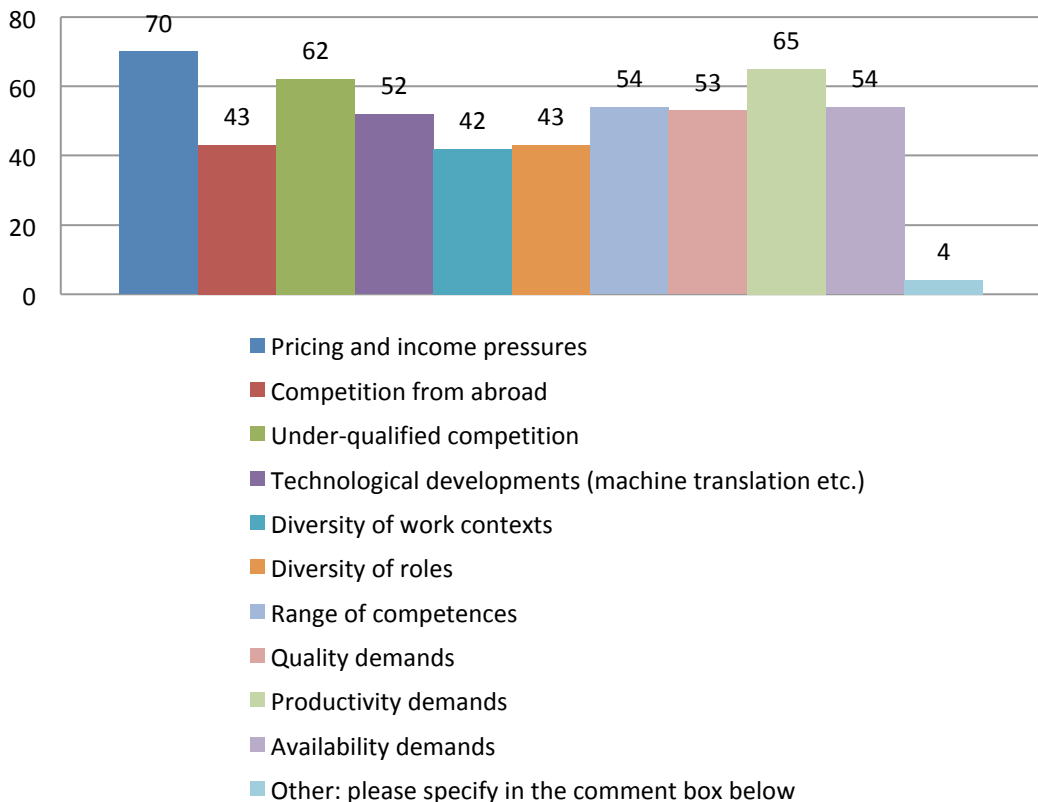
	High	Medium	Low	None	No answer
Pricing and income pressures	17 (63%)	9 (33%)	1 (4%)	-	-
Competition from abroad	4 (15%)	11 (41%)	9 (33%)	3 (11%)	-
Under-qualified competition	11 (41%)	13 (48%)	3 (11%)	-	-
Technological developments (machine translation etc.)	8 (30%)	10 (37%)	8 (30%)	1 (4%)	-
Diversity of work contexts	3 (11%)	11 (41%)	11 (41%)	2 (7%)	-
Diversity of roles	3 (11%)	12 (44%)	10 (37%)	2 (7%)	-
Range of competences	8 (30%)	11 (41%)	8 (30%)	-	-
Quality demands	4 (15%)	18 (67%)	5 (19%)	-	-
Productivity demands	14 (52%)	10 (37%)	3 (11%)	-	-
Availability demands	6 (22%)	15 (56%)	6 (22%)	-	-
Other: please specify in the comment box below	1 (4%)	-	1 (4%)	3 (11%)	22 (81%)

n=27

1. Please indicate the degree of the **current employment challenge** posed to your **translation graduates** by:



1. Please indicate the degree of the **current employment challenge** posed to your **translation graduates** by: (coded)



Coding: high = 3, medium = 2, low = 1, none or no answer = 0

Please specify the types of technological development

(This question was only asked if *Technological developments (machine translation etc.)* in question 1 was answered with *high* or *medium*.)

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- machine translation
- Growing demand in MT, post-editing and the use of CATools. AVT and localisation constitute also a large part of the demand on the public and private market.
- Machine Translation and related skills, technologies related to multimedia and website development, accessibility tools
- Deep-learning translation system, all MAT tools.
- MT and subsequent post-editing; TM software;
- Machine translation and post-editing – plus quality – for saving time and money; being able to accommodate to the specific requirements of the translation agencies / job market (diverse)
- availability of machine translation at low or no costs
- There have been too many translators supplied from non-eligible schools or private institutes in the market and technological developments such as CAT (TRADOS, etc.) and AI (Google and vernacular NAVER, etc.) are posing more and more pricing and income pressures.
- increasing quality of machine translation
- The advances recently made in MT, the perception of readily available online MT solutions as sufficient for the translation of even high-risk documents/high-risk communication
- New programs concerning translation, Subtitling, Dubbing, Audiodescription and Respeaking
- machine translation, post-editing, technical documentation
- Increasing demand for post-editing skills

No answer: 5

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n=18

Please specify the types of work context

(This question was only asked if *Diversity of work contexts* in question 1 was answered with *high* or *medium*.)

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- on-line competition
- The work context on the private market varies from huge translation agencies to small 1-person bureaus.
- Too diverse to describe
- Government, big agencies, small businesses, freelance, some linguistic department in big companies
- From public service/community translations to all sort of text types
- institutions, companies, free-lance, language-teaching, terminology, language service providers
- 1. Lower pay for inhouse translators; 2. Lower pricing for CAT and AI translation; 3. Lower appreciation for the profession
- expert translation and language technology, language technology analyst, language process analyst, supervisor “machine learning”, evaluator “machine learning”, language/communication analyst, semantic analyst, person responsible for translation quality, data collector, data scientist, data curator, terminologist, corpus linguist, computer linguist, premium translator, premium interpreter
- Seminars
- individual entrepreneur vs. team player

No answer: 4

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n=14

Please specify the roles

(This question was only asked if *Diversity of roles* in question 1 was answered with *high* or *medium*.)

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- a) The more creative and adaptable the candidate, the better the job opportunities. b) Roles go well beyond translation and interpreting 'proper', form part of a sometimes extended work flow and involve collaboration/team work.
- Translators, revisers, post-editors, terminologists, project managers
- Translator, project manager, TM specialist, precis-writer, terminologist, post-editor
- 1. Demand for post-editing only; 2. Lower pay for existing translation editors
- mostly translator, revisor and project manager
- Respeaker (Subtitling for deaf and hard of hearing), audiodescription, interpretation, subtitling in film festivals, Visio interpretation
- translator, revisor/editor, project manager, contactor to clients

No answer: 8

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n=15

Please specify the competences

(This question was only asked if *Range of competences* in question 1 was answered with *high* or *medium*.)

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- fast-changing technologies
- In translation agencies - technological competences are considered the most important.
- Technological skills, Good language skills both from and into the foreign languages, Mastery of more than 2 foreign languages, Both written and oral skills, (Creative) writing skills, Management skills and marketing skills, communication skills and PR skills
- Specialized translation (legal, medicine, technical, social sciences, etc.), mainly English into French, MAT tools, etc.
- Related to the above roles and demands: translating, managing, editing/post-editing
- text design, specialized knowledge in several matters, technological competences (text processing, corpus query, CAT tools, MT), accounting and customer acquisition for free-lancers and others
- 1. Lower competence in new T&I graduates; 2. Lower recognition for competent human translators
- Depends of the role, however the whole spectrum of competences is needed: from language (textual, discourse) and cultural to technological, project management and service provision.
- To interpret, to translate and to be able to use all the concerned programs.
- Difficulty in quickly building up a client portfolio, which leads to giving up the profession
- more and more soft skills because of higher degree of (multi-cultural) team playing

No answer: 8

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n=19

Please specify any other challenges

(This question was only asked if *Other* in question 1 was answered with *high*, *medium* or *low*.)

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- Excessive publicity of AI developers is creating a social ambiance of neglecting human translators and imminent disruption of language barrier.
- Evaluation options do not sufficiently cover the variety of languages we offer.

No answer: 0

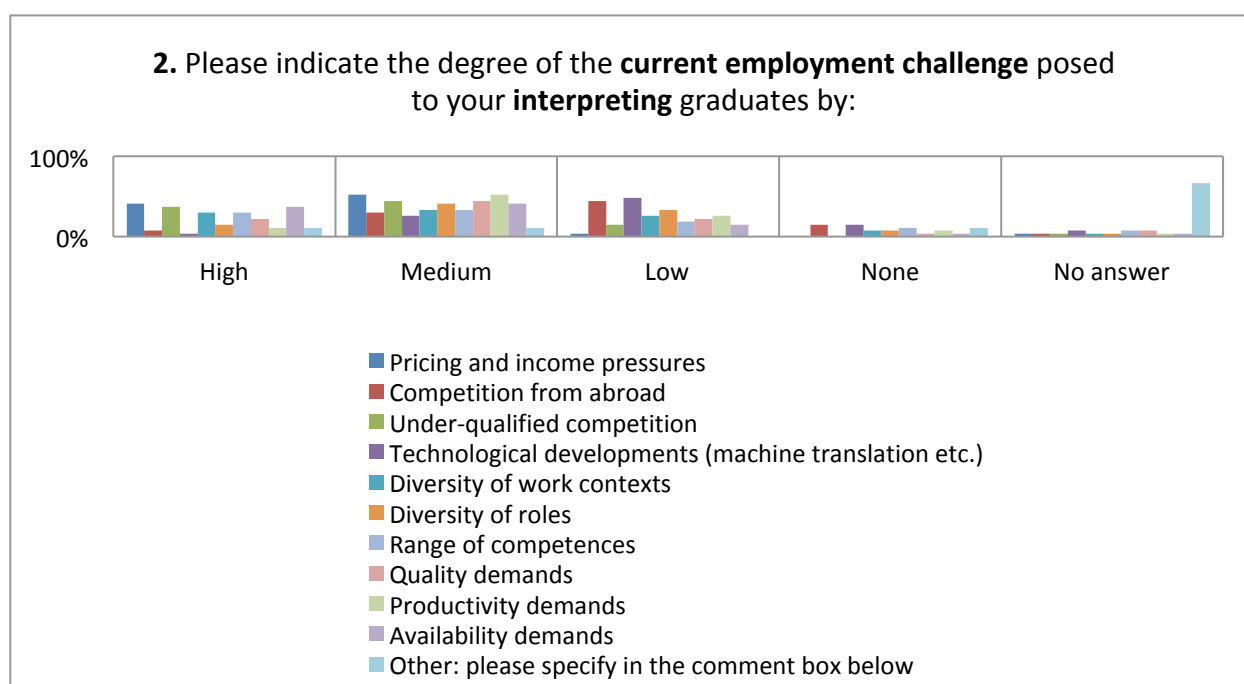
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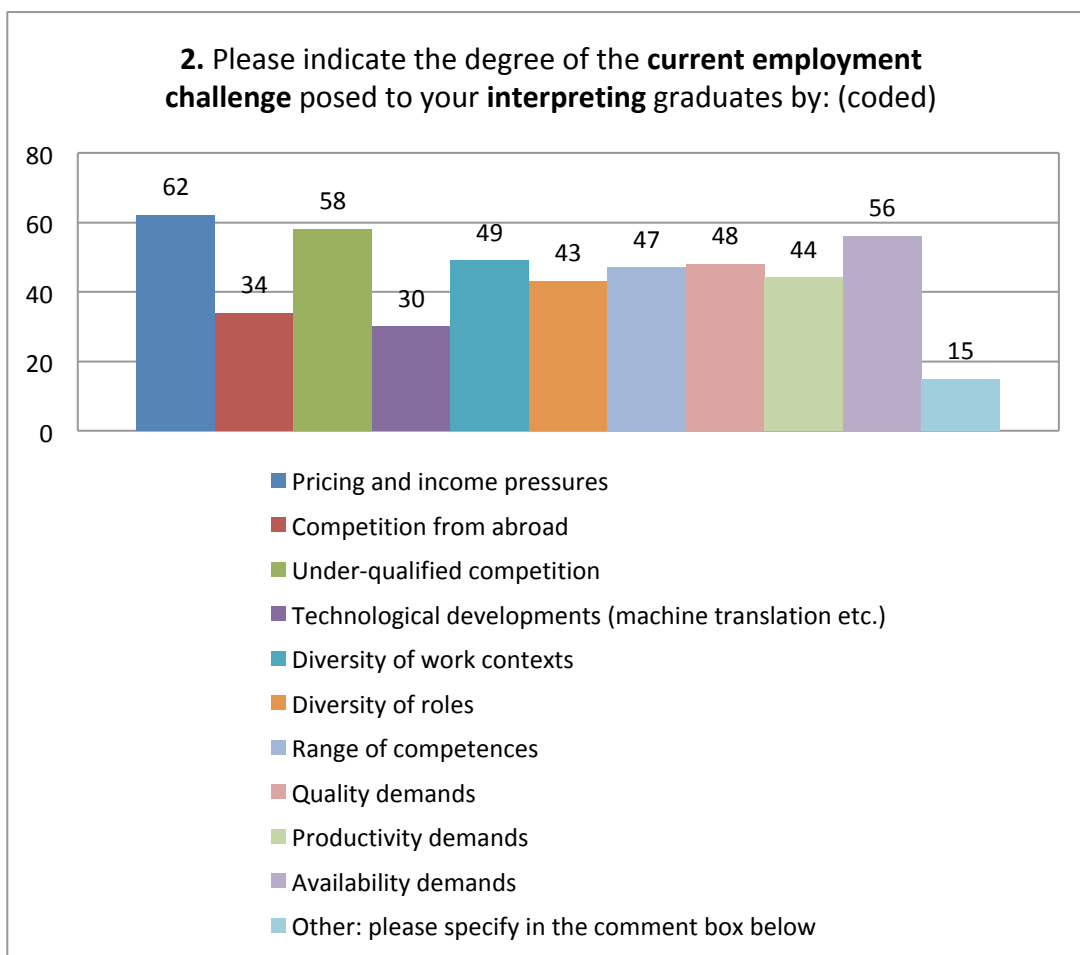
n=2

2. Please indicate the degree of the **current employment challenge** posed to your **interpreting** graduates by:

	High	Medium	Low	None	No answer
Pricing and income pressures	11 (41%)	14 (52%)	1 (4%)	-	1 (4%)
Competition from abroad	2 (7%)	8 (30%)	12 (44%)	4 (15%)	1 (4%)
Under-qualified competition	10 (37%)	12 (44%)	4 (15%)	-	1 (4%)
Technological developments (machine translation etc.)	1 (4%)	7 (26%)	13 (48%)	4 (15%)	2 (7%)
Diversity of work contexts	8 (30%)	9 (33%)	7 (26%)	2 (7%)	1 (4%)
Diversity of roles	4 (15%)	11 (41%)	9 (33%)	2 (7%)	1 (4%)
Range of competences	8 (30%)	9 (33%)	5 (19%)	3 (11%)	2 (7%)
Quality demands	6 (22%)	12 (44%)	6 (22%)	1 (4%)	2 (7%)
Productivity demands	3 (11%)	14 (52%)	7 (26%)	2 (7%)	1 (4%)
Availability demands	10 (37%)	11 (41%)	4 (15%)	1 (4%)	1 (4%)
Other: please specify in the comment box below	3 (11%)	3 (11%)	-	3 (11%)	18 (67%)

n=27





Coding: high = 3, medium = 2, low = 1, none or no answer = 0

Please specify the types of technological development

(This question was only asked if *Technological developments (machine translation etc.)* in question 2 was answered with *high* or *medium*.)

- Machine translation, terminology databases, speech to text and text to speech technologies
- remote/distance interpreting (video and telephone)
- remote settings
- The recent development of video interpreting could well pose a medium-term threat.
- videoconferences, remote interpreting, online platforms
- CA interpreting, tools for interpreters ("Workbench"), voice-over-IP, internet platforms for interpreting --> sound/image transmission quality

No answer: 2

n=8

Please specify the types of work context

(This question was only asked if *Diversity of work contexts* in question 2 was answered with *high* or *medium*.)

- For large agency the quality of the interpreting is an important issue. For the public market one can observe inconsistencies in the perception of the quality and the competences of the interpreter.
- Conference interpreting, public service interpreting of different kinds besides new forms of

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media interpreting and interpreting in educational contexts, working in access services in all of these.

- For our graduates, interpretation is mainly or even exclusively community interpreting. The work contexts are: hospital, immigration, courts, police, NGO, and in a few cases, artistic contexts.
- From public service/community to humanitarian (refugee) to business to diplomacy to international meetings.
- Working for the administration
- Interpreters are often requested to work with BIDULE instead of BOOTH
- In [country] more and more interpreters work also as translators. Since they are mostly freelancers due to the specifics of the market it is hard to survive only as an interpreter.
- Community contexts are increasingly important in [country] society rather than the booth or conference, which seems to be suffering from the increasing use of ELF.
- more remote/distance scenarios --> interpreters isolated from speakers and audience, and in worst case scenarios also from booth mate

No answer: 8

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n=17

Please specify the roles

(This question was only asked if *Diversity of roles* in question 2 was answered with *high* or *medium*.)

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- The confusion of the role of an interpreter and of an employee of any kind in a bureau is still existing
- Interpreter and mediator
- Interpreter, cultural advisor, coordinator
- Translator, interpreter, mediator, project manager....
- Interpreters play a role of WHISPERER outside of the interpreting booth and they work alone without a partner.
- When working as interpreters they combine conference interpreting with court interpreting and other types of community interpreting.
- Because of a decline in working opportunities for high-quality conference interpreters, our graduates are increasingly working in different fields where their general skills as linguists and language mediators are called for, such a translation, multilingual communication and so on.
- Needs for interpreters are increasing, but an understanding of the need for a qualified interpreter -- and what that means -- still lags behind.
- interpreter as manager of "conversation" (turn-taking...)

No answer: 6

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n=15

Please specify the competences

(This question was only asked if *Range of competences* in question 2 was answered with *high* or *medium*.)

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- Due to the high number of work contexts, interpreters need to be versatile in various knowledge fields (medicine, law, immigration, social issues...)
  - all interpreting modes for all contexts, interpreting remotely
  - Some specific one: psychological effects, working in immigrants and refugees contexts..
  - When you whisper to a bidule, your competence is often not demonstrated and the audience often cannot distinguish between good and bad interpreters.
  - It is even more demanding since they have to combine interpreter's competences with
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translators. So in addition to translator's also specific interpreter's, like transfer and interpersonal.

- Increasing demand for broader community interpreting rather than conference interpreting skills, with a focus on discourse management rather than purely cognitive skills.
- managerial, technical knowledge. in case of remote (requirements, standards, "no-gos")

No answer: 10

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n=17

Please specify any other challenges

(This question was only asked if *Other* in question 2 was answered with *high*, *medium* or *low*.)

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- Community interpreters need to have strong social and interpersonal skills.
- We just train psit interpreters and the conditions are quite different from conference interpreting. Besides many of our graduates combine both tr and in, so it's difficult to answer this question
- Excessive supply of interpreters from too many unqualified T&I schools leads to over-crowding of interpreters in the market and finally to dumping practices.
- Some answers were marked "none", not because there is no such pressure, but because the students were trained to deal with these challenges.
- Legal framework in [country] does not provide interested parties with necessary obligatory coverage in terms of interpreting (e.g. in cases of asylum procedures).

No answer: 1

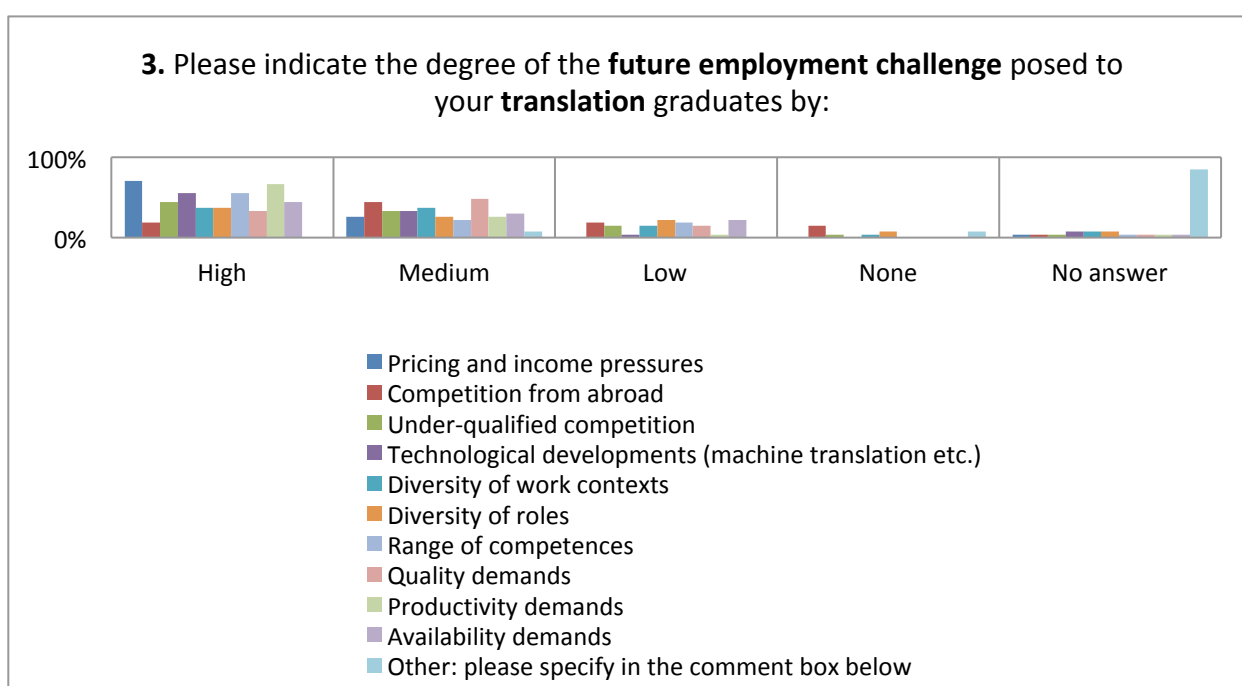
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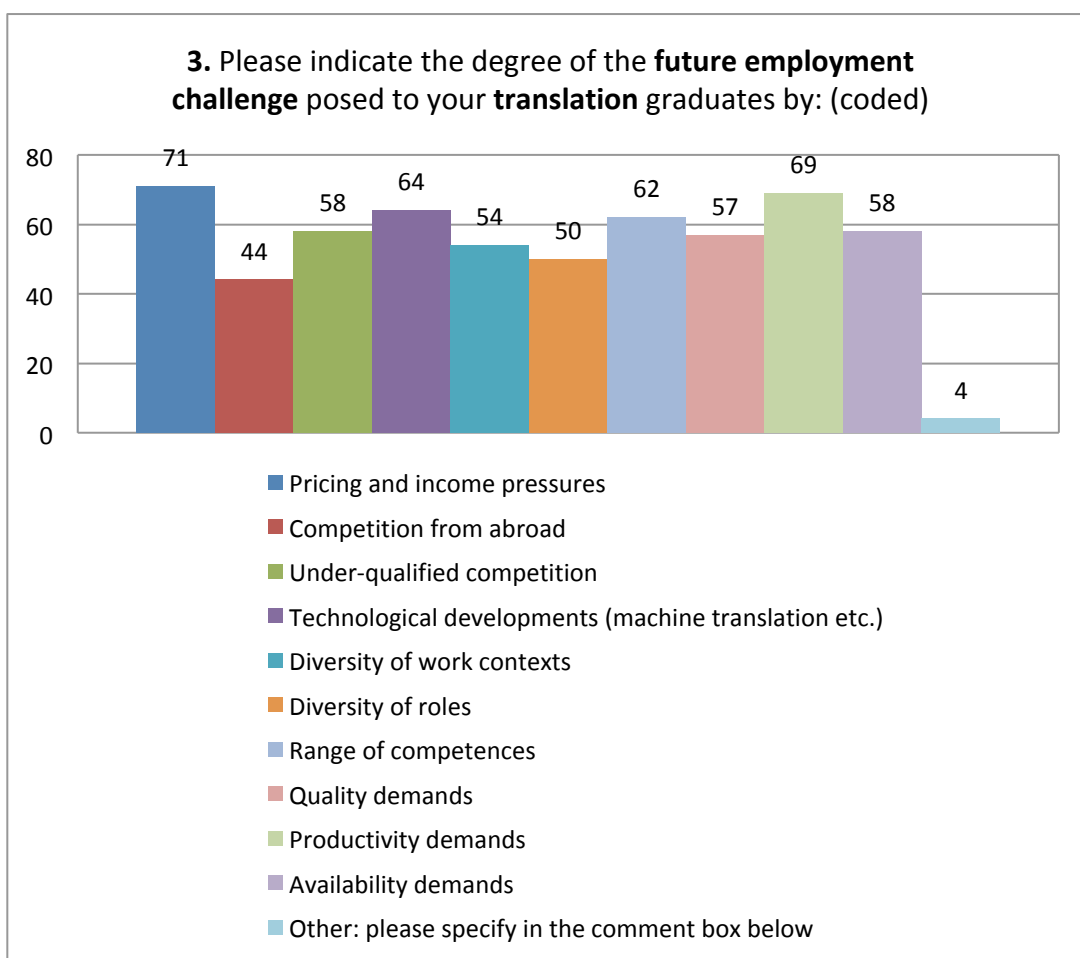
n=6

3. Please indicate the degree of the **future employment challenge** posed to your **translation** graduates by:

	High	Medium	Low	None	No answer
Pricing and income pressures	19 (70%)	7 (26%)	-	-	1 (4%)
Competition from abroad	5 (19%)	12 (44%)	5 (19%)	4 (15%)	1 (4%)
Under-qualified competition	12 (44%)	9 (33%)	4 (15%)	1 (4%)	1 (4%)
Technological developments (machine translation etc.)	15 (56%)	9 (33%)	1 (4%)	-	2 (7%)
Diversity of work contexts	10 (37%)	10 (37%)	4 (15%)	1 (4%)	2 (7%)
Diversity of roles	10 (37%)	7 (26%)	6 (22%)	2 (7%)	2 (7%)
Range of competences	15 (56%)	6 (22%)	5 (19%)	-	1 (4%)
Quality demands	9 (33%)	13 (48%)	4 (15%)	-	1 (4%)
Productivity demands	18 (67%)	7 (26%)	1 (4%)	-	1 (4%)
Availability demands	12 (44%)	8 (30%)	6 (22%)	-	1 (4%)
Other: please specify in the comment box below	-	2 (7%)	-	2 (7%)	23 (85%)

n=27





Coding: high = 3, medium = 2, low = 1, none or no answer = 0

Please specify the types of technological development

(This question was only asked if *Technological developments (machine translation etc.)* in question 3 was answered with *high* or *medium*.)

- In the future: growing demand of highly qualified specialists in MT and post-editing
- See question 1 (i.e. Machine Translation and related skills, technologies related to multimedia and website development, accessibility tools)
- Deep learning systems
- same as today but being upgraded and updated every couple of years
- advances in neural network machine translation
- AI translation of Google and vernacular AI developers
- With a rapid development of AI on one hand and availability of big data on the other, translation will be just a part of cross-language communication in virtual environment. Future translators will have to be able to be competent enough to work hand in hand with the developers of AI systems.
- increasing quality of machine translation; artificial intelligence
- Increasingly convincing NMT and other AI solutions as yet unforeseen will take over from human translators for texts and documents of everyday use; but this will bring with it an opportunity for translators to position themselves in the more cognitively and ethically demanding, adaptive segments of high-risk texts, language consultancy, transcription etc. Translators must embrace the new technologies, integrate them, profit from them where needed, and be sure to recognise and market the added value of human translation and language mediation.
- I think technological development is changing the role that a translator plays in some

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situations. I also feel, as with interpretation, it's increasing an understanding of the need for translation -- but not an understanding of the limits of technology and/or the role that a qualified translator/editor plays.

- The graduates are more and more confronted to technological challenges: they have to master different kinds of CAT Tools (Trados Studio, Trados, SDLX, Transit, Word Fast, etc.) and how to edit the machine's product .
- technological development will bring new equipment (HW/SW) -- > students have to get prepared for this

No answer: 12

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n=24

Please specify the types of work context

(This question was only asked if *Diversity of work contexts* in question 3 was answered with *high* or *medium*.)

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- The development of big translation agencies
- See question 1 (i.e. Too diverse to describe)
- Same as above (i.e. 1: Government, big agencies, small businesses, freelance, some linguistic department in big companies; i.e. 2: For our graduates, interpretation is mainly or even exclusively community interpreting. The work contexts are: hospital, immigration, courts, police, NGO, and in a few cases, artistic contexts.)
- institutions, companies, free-lance, language-teaching, terminology, language service providers
- Clients say before orders, "Do you use CAT or AI? If yes, come down on price. We can ask other translators if you call too high."
- There will be more and more work connected with data management and less with traditional translation, so the work contexts will definitely change a lot.
- expert translation and language technology, language technology analyst, language process analyst, supervisor "machine learning", evaluator "machine learning", language/communication analyst, semantic analyst, person responsible for translation quality, data collector, data scientist, data curator, terminologist, corpus linguist, computer linguist, premium translator, premium interpreter
- To bring their human added value to bear, translators will have to abandon their position at the end of the workflow and be increasingly involved in the development and design of multilingual communication much earlier in the process. They will have to work much more closely together with communications specialists in related though different fields such as corporate communications and technical communication.
- International Organisations; Free Lance Translators
- technological development will bring new scenarios (voice to text, ...)
- distance translation; work in open spaces (noise, difficulty to concentrate...)

No answer: 9

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n=20

Please specify the roles

(This question was only asked if *Diversity of roles* in question 3 was answered with *high* or *medium*.)

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- The specialisation of the roles/tasks of an language service provider
  - See question 1 (i. e. The more creative and adaptable the candidate, the better the job opportunities. / Roles go well beyond translation and interpreting 'proper', form part of a sometimes extended work flow and involve collaboration/team work.)
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- More post-edition than before.
  - There are demands that we probably cannot even think of today that might be in the picture tomorrow... + same as today
  - translator, proof-reader, corpus linguist, computational linguist/programmer
  - Clients do not really appreciate the role and value of good human translators.
  - Due to the development of AI and new technologies, also for translation, probably there will be a switch from roles that we have today into a set of new roles.
  - The new contexts will demand new roles - as intercultural mediators, advisors, text designers, language mediation managers, educators etc.
  - manager, technician...

No answer: 8

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n=17

Please specify the competences

(This question was only asked if *Range of competences* in question 3 was answered with *high* or *medium*.)

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- Development of technological competences
- See question 1 (i.e. Technological skills; Good language skills both from and into the foreign languages; Mastery of more than 2 foreign languages; Both written and oral skills; (Creative) writing skills; Management skills and marketing skills, communication skills and PR skills)
- Same as above (i.e. 1: Specialized translation (legal, medicine, technical, social sciences, etc.), mainly English into French, CAT tools, etc.; i.e. 2: Due to the high number of work contexts, interpreters need to be versatile in various knowledge fields (medicine, law, immigration, social issues...))
- classical translation with all its aspects; integration of technological support into the classical translator's work (CAT tools); corpus compilation, processing and querying; shell scripting/programming for natural language processing; training of MT engines
- Clients often depreciate the competences of human translators and comments ""Your translation is slightly different from AI work. Why should we pay you so dearly?""
- The focus of competences will definitely switch to the digital humanities/digital linguistics competences. Natural environment of new translator will be digital world, different that is today. Due to the availability of data and the development of sustainable infrastructure which will enable efficient access to high quality lexical and terminological data connected to Linked Open Data and the Semantic Web the whole working environment will change significantly.
- The competence models will have to be broadened to accommodate the new roles. More weight must be given to intercultural and transcultural mediation, to adaptive rather than routine cognitive activity, to interactive advisory faculties, to text production and design, to language mediation management, to the integration and management of socio-technical workflows and to the ability to act as consultants in professional and paraprofessional language mediation.
- Standard Procedures: The standard process flow they follow for their projects such as: Product specification, Research, Text Production, Text evaluation, Text review according to the client's feedback, if any.
- soft skills, managerial + technical competences

No answer: 12

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n=21

Please specify any other challenges

(This question was only asked if *Other* in question 3 was answered with *high*, *medium* or *low*.)

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– Currently, employment rates are still very good, but we cannot foresee the future.

No answer: 1

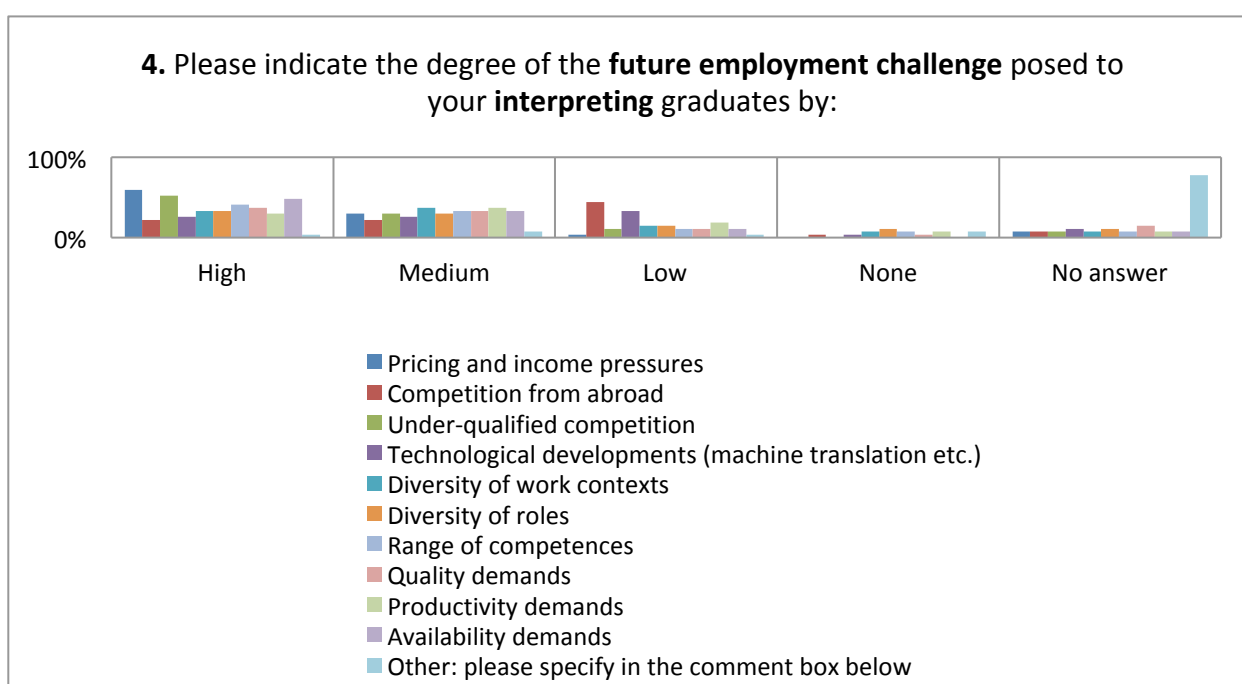
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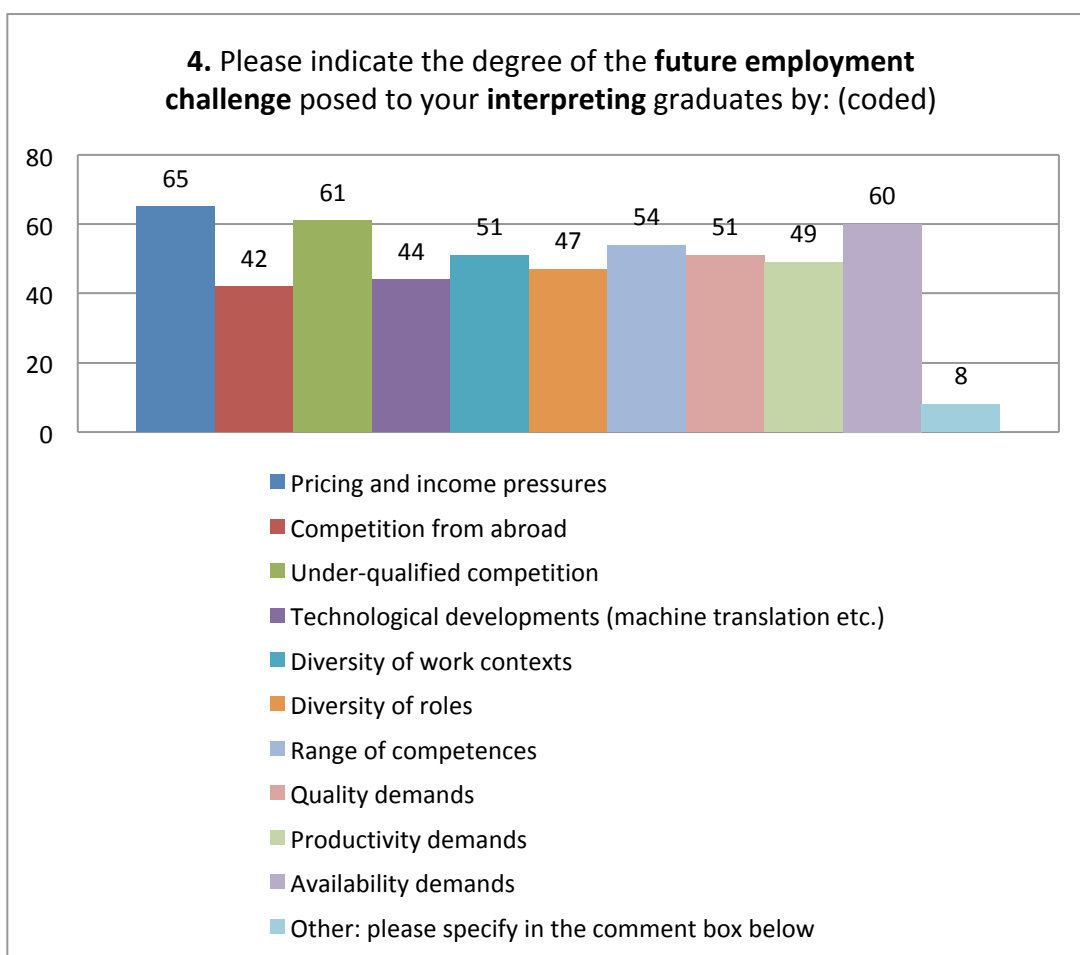
n=2

4. Please indicate the degree of the **future employment challenge** posed to your **interpreting** graduates by:

	High	Medium	Low	None	No answer
Pricing and income pressures	16 (59%)	8 (30%)	1 (4%)	-	2 (7%)
Competition from abroad	6 (22%)	6 (22%)	12 (44%)	1 (4%)	2 (7%)
Under-qualified competition	14 (52%)	8 (30%)	3 (11%)	-	2 (7%)
Technological developments (machine translation etc.)	7 (26%)	7 (26%)	9 (33%)	1 (4%)	3 (11%)
Diversity of work contexts	9 (33%)	10 (37%)	4 (15%)	2 (7%)	2 (7%)
Diversity of roles	9 (33%)	8 (30%)	4 (15%)	3 (11%)	3 (11%)
Range of competences	11 (41%)	9 (33%)	3 (11%)	2 (7%)	2 (7%)
Quality demands	10 (37%)	9 (33%)	3 (11%)	1 (4%)	4 (15%)
Productivity demands	8 (30%)	10 (37%)	5 (19%)	2 (7%)	2 (7%)
Availability demands	13 (48%)	9 (33%)	3 (11%)	-	2 (7%)
Other: please specify in the comment box below	1 (4%)	2 (7%)	1 (4%)	2 (7%)	21 (78%)

n=27





Coding: high = 3 points, medium = 2 points, low = 1 point, none or no answer = 0 points

Please specify the types of technological development

(This question was only asked if *Technological developments (machine translation etc.)* in question 4 was answered with *high* or *medium*.)

- See question 2 (i.e. Machine translation, terminology databases, speech to text and text to speech technologies)
- Voice recognition coupled to automated translation.
- same as today but upgraded...; AI?
- Systems that combine machine translation with speech recognition and synthesis show impressive results. Probably also the work of interpreters will change, however due to the prestige in the international environments, especially conference interpreting will not change dramatically in a near future.
- artificial intelligence
- Increased use of technologies for video/distance interpreting, enabling local markets to be undercut
- more remote, voice-to-text, text-to-speech
- remote interpretation; video-conferencing...

No answer: 6

n=14

Please specify the types of work context

(This question was only asked if *Diversity of work contexts* in question 4 was answered with *high* or *medium*.)

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- New contexts of work due to the migration crises in the world
- See question 2 (i.e. Conference interpreting, public service interpreting of different kinds besides new forms of media interpreting and interpreting in educational contexts, working in access services in all of these.)
- Same as above. (i.e. 1: Government, big agencies, small businesses, freelance, some linguistic department in big companies; i.e. 2: For our graduates, interpretation is mainly or even exclusively community interpreting. The work contexts are: hospital, immigration, courts, police, NGO, and in a few cases, artistic contexts.)
- Not sure there will be different new contexts
- a) Compulsory use of bidule and solo interpreting task for more than 6 hours a day. b) Clients demand more remote interpreting.
- Similar to current situation.
- Increased demand for non-conference contexts (community, public, migration, humanitarian, social and health services etc.)
- remote/distance scenarios --> students have to get prepared during their studies
- conference, media, internet-based...

No answer: 10

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n=19

Please specify the roles

(This question was only asked if *Diversity of roles* in question 4 was answered with *high* or *medium*.)

---

- Growing demand of interpreters/mediators (in different settings)
- See question 2 (i.e. Interpreter and mediator)
- Interpreters are sometimes requested to work without proper video relay with only audio relay.
- Similar to current situation.
- Flexibility and diversification of roles to those of advisor's and language/intercultural mediators in the aforementioned contexts
- more managerial
- language and (inter)cultural expert

No answer: 10

---

n=17

Please specify the competences

(This question was only asked if *Range of competences* in question 4 was answered with *high* or *medium*.)

---

- Interpersonal and intercultural competences will be more important than linguistic ones
  - See question 2 [was not answered in question 2; answer in question 1: Technological skills; Good language skills both from and into the foreign languages; Mastery of more than 2 foreign languages; Both written and oral skills; (Creative) writing skills; Management skills and marketing skills, communication skills and PR skills]
  - Same as above. (i.e. 1: Specialized translation (legal, medicine, technical, social sciences, etc.), mainly English into French, MAT tools, etc.; i.e. 2: Due to the high number of work contexts, interpreters need to be versatile in various knowledge fields (medicine, law, immigration, social issues...))
-

- 
- Distance/remote will likely affect some of the competences...
  - With bidule and video conferencing, clients cannot easily distinguish good interpreters from bad ones.
  - Similar to current situation. More technological competences will be needed.
  - Broader language mediation management and advisory competences to accommodate the above roles and contexts, less routine and more adaptive cognitive expertise
  - technical competences, soft skills
  - advanced language skills (systematic work into B)

No answer: 11

---

n=20

Please specify any other challenges

(This question was only asked if *Other* in question 4 was answered with *high*, *medium* or *low*.)

---

- Interpreting has not been affected by technological developments as much as translation, but the increase of good English speakers in the community decreases the demand of interpreters and it frightens the interpreters more than tech. advances.
- Some answers were marked "none", not because there is no such pressure, but because the students were trained to deal with these challenges.
- Current employment rates are very good, but we cannot foresee the future.

No answer: 1

---

n=4

## Part 2

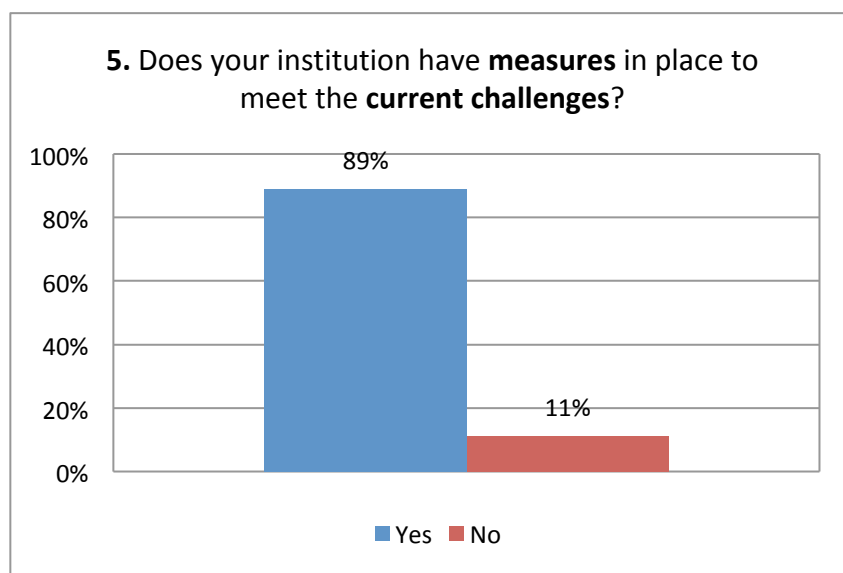
### 5. Does your institution have **measures** in place to meet the **current challenges**?

---

Yes	24 (89%)
No	3 (11%)
No answer	-

---

n=27



Please indicate the types of measure from the following (multiple answers are possible):  
(This question was only asked if question 5 was answered with Yes.)

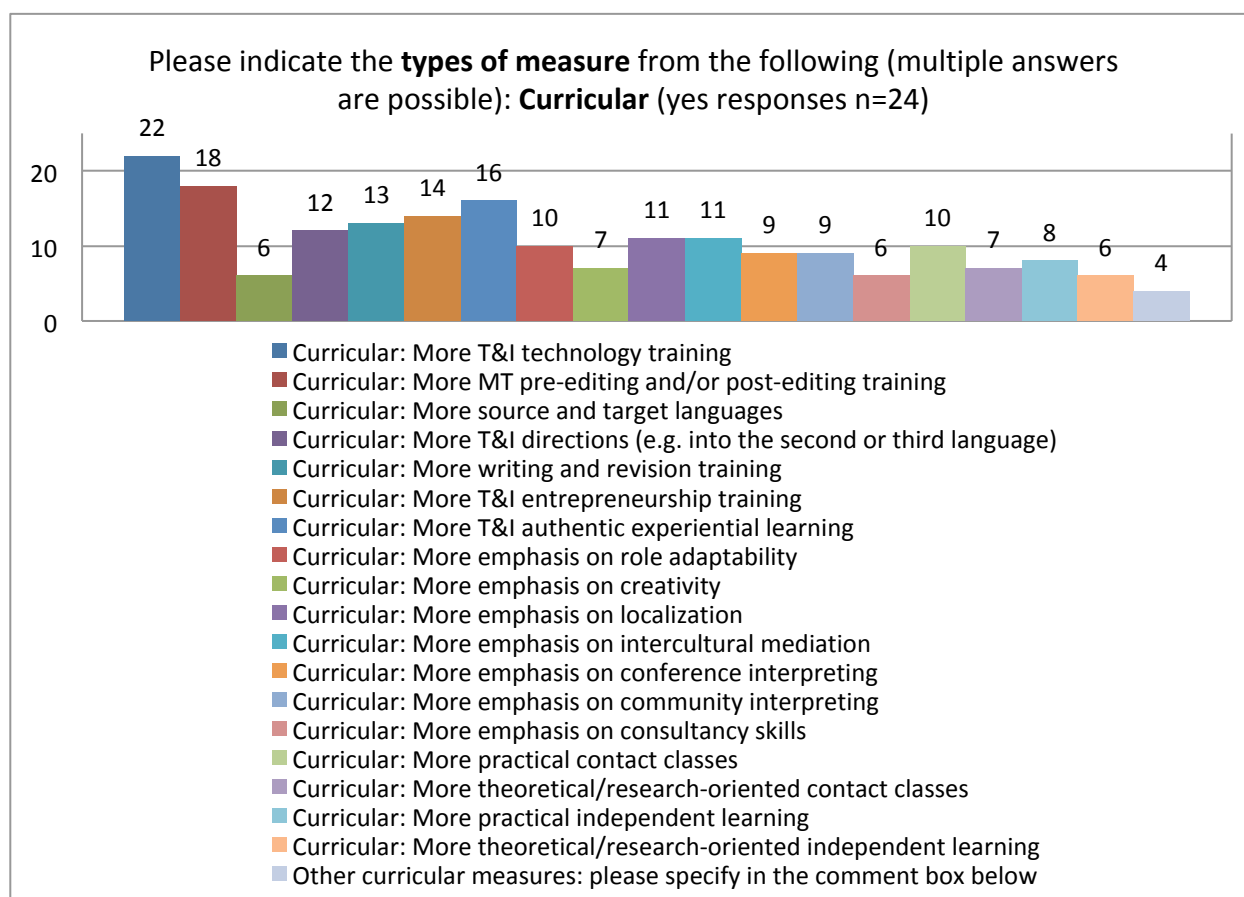
---

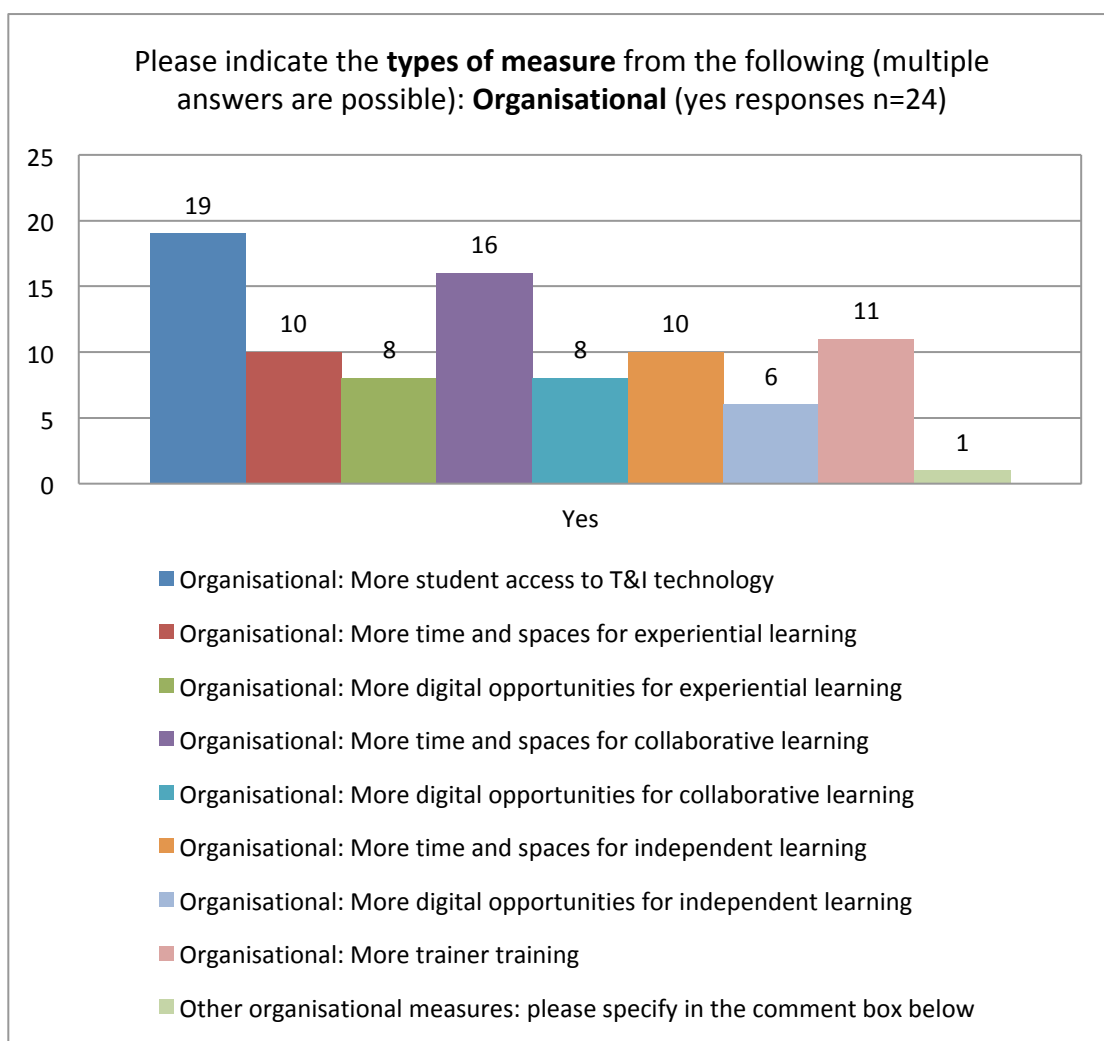
Curricular: More T&I technology training	22 (92%)
Curricular: More MT pre-editing and/or post-editing training	18 (75%)
Curricular: More source and target languages	6 (25%)
Curricular: More T&I directions (e.g. into the second or third language)	12 (50%)
Curricular: More writing and revision training	13 (54%)
Curricular: More T&I entrepreneurship training	14 (58%)
Curricular: More T&I authentic experiential learning	16 (67%)
Curricular: More emphasis on role adaptability	10 (42%)
Curricular: More emphasis on creativity	7 (29%)
Curricular: More emphasis on localization	11 (46%)
Curricular: More emphasis on intercultural mediation	11 (46%)
Curricular: More emphasis on conference interpreting	9 (38%)
Curricular: More emphasis on community interpreting	9 (38%)
Curricular: More emphasis on consultancy skills	6 (25%)
Curricular: More practical contact classes	10 (42%)
Curricular: More theoretical/research-oriented contact classes	7 (29%)

---

Curricular: More practical independent learning	8 (33%)
Curricular: More theoretical/research-oriented independent learning	6 (25%)
Other curricular measures: please specify in the comment box below	4 (17%)
Organisational: More student access to T&I technology	19 (79%)
Organisational: More time and spaces for experiential learning	10 (42%)
Organisational: More digital opportunities for experiential learning	8 (33%)
Organisational: More time and spaces for collaborative learning	16 (67%)
Organisational: More digital opportunities for collaborative learning	8 (33%)
Organisational: More time and spaces for independent learning	10 (42%)
Organisational: More digital opportunities for independent learning	6 (25%)
Organisational: More trainer training	11 (46%)
Other organisational measures: please specify in the comment box below	1 (4%)

n=24





Comment box for “Other curricular measures”: please give brief details

(This question was only asked if *Other curricular measures* in the previous question was ticked.)

- The curriculum is expanding into different forms of "inclusion".
- Situated/work-integrated learning both in excursion (students are placed in the industry) and incursion (the industry spends more time in the classroom) modes.
- More emphasis on intralingual translation skills - e.g. barrier-free communication.
- virtual classes in collaboration with partner universities

No answer: 0

n=4

Comment box for “Other organisational measures”: please give brief details

(This question was only asked if *Other organisational measures* in the previous question was ticked.)

- Participative strategy-building to meet the current and future challenges (training committees, working groups etc.); Intensification of teaching innovation through time and money allocation

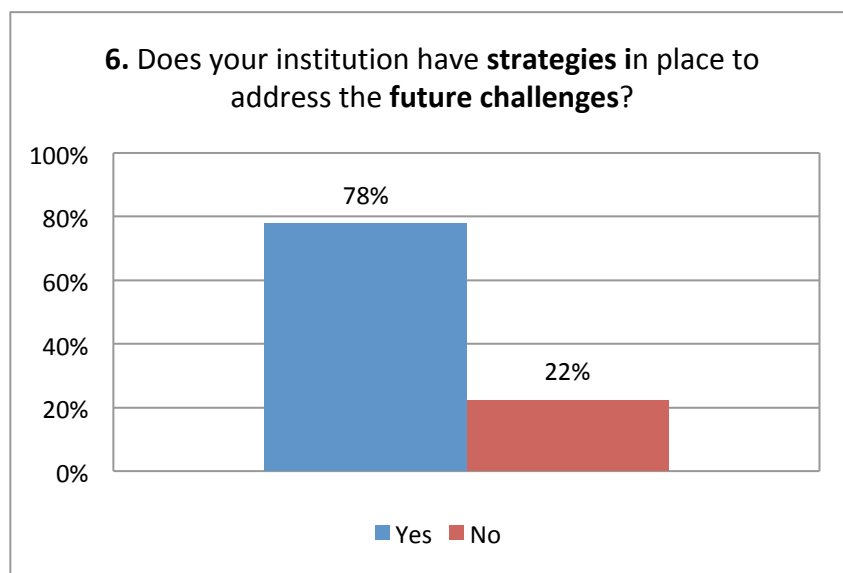
No answer: 0

n=1

**6. Does your institution have strategies in place to address the future challenges?**

Yes	21 (78%)
No	6 (22%)
No answer	-

n=27

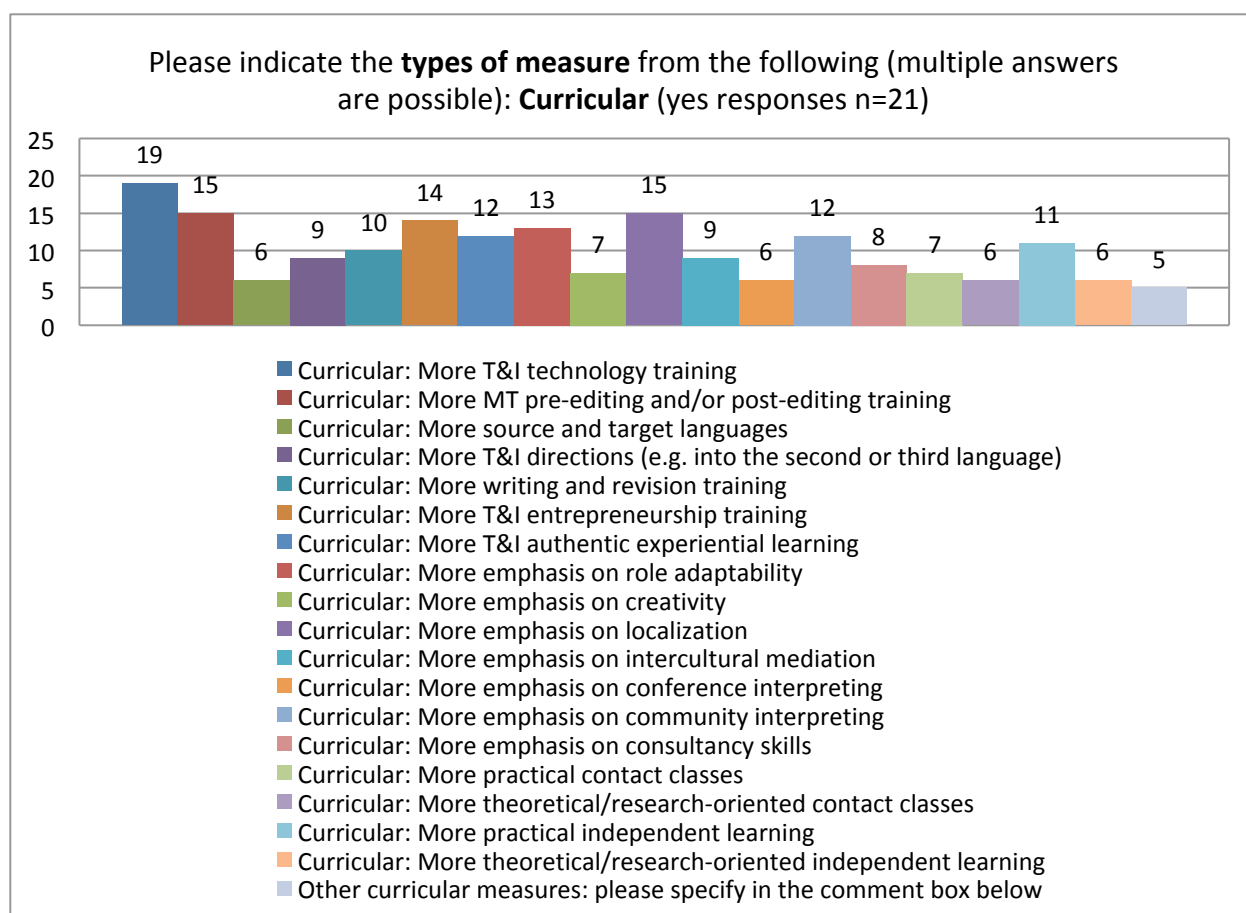


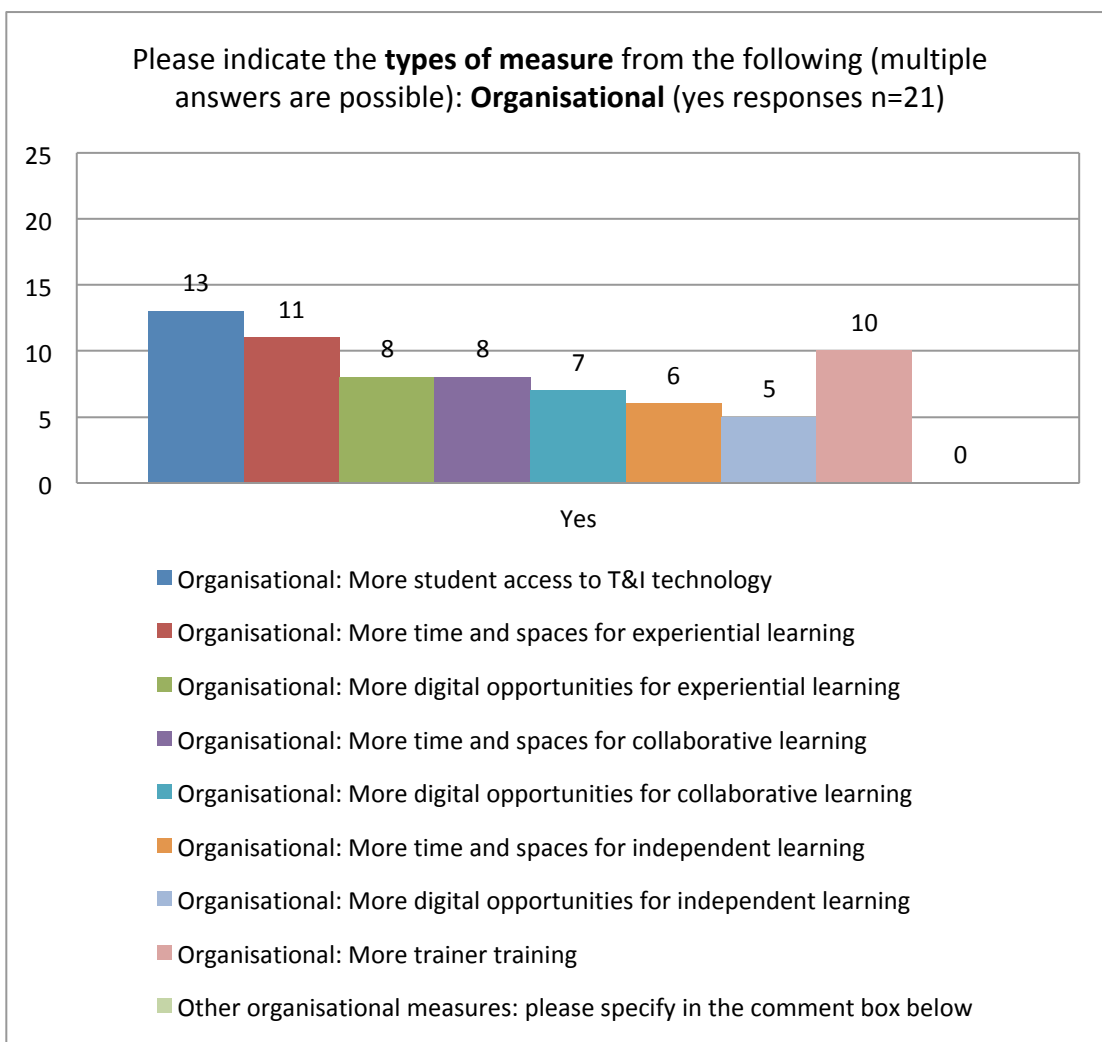
Please indicate the types of measure from the following (multiple answers are possible):  
(This question was only asked if question 6 was answered with Yes.)

Curricular: More T&I technology training	19 (90%)
Curricular: More MT pre-editing and/or post-editing training	15 (71%)
Curricular: More source and target languages	6 (29%)
Curricular: More T&I directions (e.g. into the second or third language)	9 (43%)
Curricular: More writing and revision training	10 (48%)
Curricular: More T&I entrepreneurship training	14 (67%)
Curricular: More T&I authentic experiential learning	12 (57%)
Curricular: More emphasis on role adaptability	13 (62%)
Curricular: More emphasis on creativity	7 (33%)
Curricular: More emphasis on localization	15 (71%)
Curricular: More emphasis on intercultural mediation	9 (43%)
Curricular: More emphasis on conference interpreting	6 (29%)
Curricular: More emphasis on community interpreting	12 (57%)
Curricular: More emphasis on consultancy skills	8 (38%)
Curricular: More practical contact classes	7 (33%)
Curricular: More theoretical/research-oriented contact classes	6 (29%)
Curricular: More practical independent learning	11 (52%)
Curricular: More theoretical/research-oriented independent learning	6 (29%)

Other curricular measures: please specify in the comment box below	5 (24%)
Organisational: More student access to T&I technology	13 (62%)
Organisational: More time and spaces for experiential learning	11 (52%)
Organisational: More digital opportunities for experiential learning	8 (38%)
Organisational: More time and spaces for collaborative learning	8 (38%)
Organisational: More digital opportunities for collaborative learning	7 (33%)
Organisational: More time and spaces for independent learning	6 (29%)
Organisational: More digital opportunities for independent learning	5 (24%)
Organisational: More trainer training	10 (48%)
Other organisational measures: please specify in the comment box below	-

n=21





Comment box for “Other curricular measures”: please give brief details

(This question was only asked if *Other curricular measures* in the previous question was ticked.)

- Development of new forms of interpreting not mentioned above.
- BA, DESS and MA have been redesigned. Changes are being implemented. We will have periodical reviews of the programs.
- focus on language technology in MA Translation Science and Technology (MT, corpus linguistics, natural language processing, shell scripting)
- We are currently developing a new MA study program in Digital Linguistics, joint MA with [university] and [university].

No answer: 1

n=5

Comment box for “Other organisational measures”: please give brief details

(This question was only asked if *Other organisational measures* in the previous question was ticked.)

-

No answer: 0

n=0

**Appendix:**  
**TIGES 21 questionnaire (March/April  
2018)**

# TIGES 21 Online Survey

## About this survey

Thank you very much for taking the time to complete this short survey. It has been developed as part of a CIUTI working-group project, "T&I Graduate Employment Strategies in the 21st Century" (TIGES 21).

The survey should take no longer than **10 minutes** to complete.

TIGES 21 aims to lay some basic strategic cornerstones for CIUTI members to meet current and future challenges to graduate employment. It seeks to address some major factors likely to affect graduate employment prospects and working conditions as a result of technological advances, shifts in demand for human T&I services and the growing diversity of contexts of work for interpreters and translators.

Your responses will be an enormous help to us in establishing

- how CIUTI members see current and future challenges to T&I graduate employment
- what is already being done to meet those challenges and
- what future strategies are in place to meet them.

We hope to present the main results of this survey at the next CIUTI General Assembly in Edinburgh at the end of May 2018.

By taking part in the survey, you agree that your responses on behalf of the institutions you represent will be used for research purposes. There are 33 questions in this survey.

Please tell us more about the CIUTI institution you represent and how we can contact you.

1. Please indicate the degree of the **current** employment challenge posed to your **translation** graduates by:

Please choose the appropriate response for each item:

	High	Medium	Low	None
Pricing and income pressures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competition from abroad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Under-qualified competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technological developments (machine translation etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diversity of work contexts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diversity of roles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Range of competences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality demands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Productivity demands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability demands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other: please specify in the comment box below	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the types of technological development

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' at question '2 [Page3]' (1. Please indicate the degree of the current employment challenge posed to your translation graduates by: (Technological developments (machine translation etc.)))

Please write your answer here:

Please specify the types of work context

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' at question '2 [Page3]' (1. Please indicate the degree of the current employment challenge posed to your translation graduates by: (Diversity of work contexts))

Please write your answer here:

Please specify the roles

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' at question '2 [Page3]' (1. Please indicate the degree of the current employment challenge posed to your translation graduates by: (Diversity of roles))

Please write your answer here:

Please specify the competences

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' at question '2 [Page3]' (1. Please indicate the degree of the current employment challenge posed to your translation graduates by: (Range of competences))

Please write your answer here:

Please specify any other challenges

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' or 'Low' at question '2 [Page3]' (1. Please indicate the degree of the current employment challenge posed to your translation graduates by: (Other: please specify in the comment box below))

Please write your answer here:

2. Please indicate the degree of the **current** employment challenge posed to your **interpreting** graduates by:

Please choose the appropriate response for each item:

	High	Medium	Low	None
<b>Pricing and income pressures</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Competition from abroad</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Under-qualified competition</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Technological developments (machine translation etc.)</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Diversity of work contexts</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Diversity of roles</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Range of competences</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Quality demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Productivity demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Availability demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Other: please specify in the comment box below</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the types of technological development

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' at question '8 [Page4]' (2. Please indicate the degree of the current employment challenge posed to your interpreting graduates by: (Technological developments (machine translation etc.)))

Please write your answer here:

Please specify the types of work context

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' at question '8 [Page4]' (2. Please indicate the degree of the current employment challenge posed to your interpreting graduates by: (Diversity of work contexts))

Please write your answer here:

Please specify the roles

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' at question '8 [Page4]' (2. Please indicate the degree of the current employment challenge posed to your interpreting graduates by: (Diversity of roles))

Please write your answer here:

Please specify the competences

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' at question '8 [Page4]' (2. Please indicate the degree of the current employment challenge posed to your interpreting graduates by: (Range of competences))

Please write your answer here:

Please specify any other challenges

Only answer this question if the following conditions are met:

Answer was 'Low' or 'Medium' or 'High' at question '8 [Page4]' (2. Please indicate the degree of the current employment challenge posed to your interpreting graduates by: (Other: please specify in the comment box below))

Please write your answer here:

3. Please indicate the degree of the **future** employment challenge posed to your **translation** graduates by:

Please choose the appropriate response for each item:

	High	Medium	Low	None
<b>Pricing and income pressures</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Competition from abroad</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Under-qualified competition</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Technological developments (machine translation etc.)</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Diversity of work contexts</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Diversity of roles</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Range of competences</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Quality demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Productivity demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Availability demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Other: please specify in the comment box below</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the types of technological development

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' at question '14 [Page5]' (3. Please indicate the degree of the future employment challenge posed to your translation graduates by: (Technological developments (machine translation etc.)))

Please write your answer here:

Please specify the types of work context

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' at question '14 [Page5]' (3. Please indicate the degree of the future employment challenge posed to your translation graduates by: (Diversity of work contexts))

Please write your answer here:

Please specify the roles

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' at question '14 [Page5]' (3. Please indicate the degree of the future employment challenge posed to your translation graduates by: (Diversity of roles))

Please write your answer here:

Please specify the competences

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' at question '14 [Page5]' (3. Please indicate the degree of the future employment challenge posed to your translation graduates by: (Range of competences))

Please write your answer here:

Please specify any other challenges

Only answer this question if the following conditions are met:

Answer was 'Low' or 'Medium' or 'High' at question '14 [Page5]' (3. Please indicate the degree of the future employment challenge posed to your translation graduates by: (Other: please specify in the comment box below))

Please write your answer here:

4. Please indicate the degree of the **future** employment challenge posed to your **interpreting** graduates by:

Please choose the appropriate response for each item:

	High	Medium	Low	None
<b>Pricing and income pressures</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Competition from abroad</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Under-qualified competition</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Technological developments (machine translation etc.)</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Diversity of work contexts</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Diversity of roles</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Range of competences</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Quality demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Productivity demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Availability demands</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>Other: please specify in the comment box below</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify the types of technological development

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' at question '20 [Page6]' (4. Please indicate the degree of the future employment challenge posed to your interpreting graduates by: (Technological developments (machine translation etc.)))

Please write your answer here:

Please specify the types of work context

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' at question '20 [Page6]' (4. Please indicate the degree of the future employment challenge posed to your interpreting graduates by: (Diversity of work contexts))

Please write your answer here:

Please specify the roles

Only answer this question if the following conditions are met:

Answer was 'High' or 'Medium' at question '20 [Page6]' (4. Please indicate the degree of the future employment challenge posed to your interpreting graduates by: (Diversity of roles))

Please write your answer here:

Please specify the competences

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' at question '20 [Page6]' (4. Please indicate the degree of the future employment challenge posed to your interpreting graduates by: (Range of competences))

Please write your answer here:

Please specify any other challenges

Only answer this question if the following conditions are met:

Answer was 'Medium' or 'High' or 'Low' at question '20 [Page6]' (4. Please indicate the degree of the future employment challenge posed to your interpreting graduates by: (Other: please specify in the comment box below))

Please write your answer here:

5. Does your institution have measures in place to meet the current challenges?

❗ Choose one of the following answers

Please choose **only one** of the following:

- Yes
- No

Please indicate the types of measure from the following (multiple answers are possible):

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '26 [Page7]' (5. Does your institution have measures in place to meet the current challenges? )

**i** Check all that apply

Please choose **all** that apply:

- Curricular: More T&I technology training
- Curricular: More MT pre-editing and/or post-editing training
- Curricular: More source and target languages
- Curricular: More T&I directions (e.g. into the second or third language)
- Curricular: More writing and revision training
- Curricular: More T&I entrepreneurship training
- Curricular: More T&I authentic experiential learning
- Curricular: More emphasis on role adaptability
- Curricular: More emphasis on creativity
- Curricular: More emphasis on localization
- Curricular: More emphasis on intercultural mediation
- Curricular: More emphasis on conference interpreting
- Curricular: More emphasis on community interpreting
- Curricular: More emphasis on consultancy skills
- Curricular: More practical contact classes
- Curricular: More theoretical/research-oriented contact classes
- Curricular: More practical independent learning
- Curricular: More theoretical/research-oriented independent learning
- Other curricular measures: please specify in the comment box below
- Organisational: More student access to T&I technology
- Organisational: More time and spaces for experiential learning
- Organisational: More digital opportunities for experiential learning
- Organisational: More time and spaces for collaborative learning
- Organisational: More digital opportunities for collaborative learning
- Organisational: More time and spaces for independent learning
- Organisational: More digital opportunities for independent learning
- Organisational: More trainer training
- Other organisational measures: please specify in the comment box below

### Comment box for "Other curricular measures": please give brief details

Only answer this question if the following conditions are met:

Answer was at question '27 [Page7Question2]' (Please indicate the types of measure from the following (multiple answers are possible): )

Please write your answer here:

## Comment box for "Other organisational measures": please give brief details

Only answer this question if the following conditions are met:

Answer was at question '27 [Page7Question2]' (Please indicate the types of measure from the following (multiple answers are possible): )

Please write your answer here:

6. Does your institution have strategies in place to address the future challenges?

❗ Choose one of the following answers

Please choose **only one** of the following:

Yes

No

Please indicate the types of measure from the following (multiple answers are possible):

Only answer this question if the following conditions are met:

Answer was 'Yes' at question '30 [Page8]' (6. Does your institution have strategies in place to address the future challenges? )

🗨️ Check all that apply

Please choose **all** that apply:

- Curricular: More T&I technology training
- Curricular: More MT pre-editing and/or post-editing training
- Curricular: More source and target languages
- Curricular: More T&I directions (e.g. into the second or third language)
- Curricular: More writing and revision training
- Curricular: More T&I entrepreneurship training
- Curricular: More T&I authentic experiential learning
- Curricular: More emphasis on role adaptability
- Curricular: More emphasis on creativity
- Curricular: More emphasis on localization
- Curricular: More emphasis on intercultural mediation
- Curricular: More emphasis on conference interpreting
- Curricular: More emphasis on community interpreting
- Curricular: More emphasis on consultancy skills
- Curricular: More practical contact classes
- Curricular: More theoretical/research-oriented contact classes
- Curricular: More practical independent learning
- Curricular: More theoretical/research-oriented independent learning
- Other curricular measures: please specify in the comment box below
- Organisational: More student access to T&I technology
- Organisational: More time and spaces for experiential learning
- Organisational: More digital opportunities for experiential learning
- Organisational: More time and spaces for collaborative learning
- Organisational: More digital opportunities for collaborative learning
- Organisational: More time and spaces for independent learning
- Organisational: More digital opportunities for independent learning
- Organisational: More trainer training
- Other organisational measures: please specify in the comment box below

### Comment box for "Other curricular measures": please give brief details

Only answer this question if the following conditions are met:

Answer was at question '31 [Page8Question2]' (Please indicate the types of measure from the following (multiple answers are possible): )

Please write your answer here:

## Comment box for "Other organisational measures": please give brief details

Only answer this question if the following conditions are met:

Answer was at question '31 [Page8Question2]' (Please indicate the types of measure from the following (multiple answers are possible): )

Please write your answer here:

Submit your survey.

Thank you for completing this survey.