

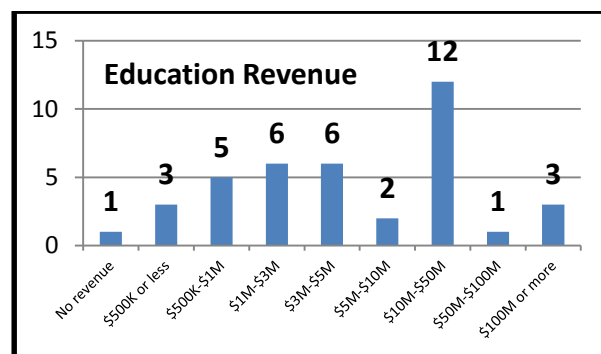
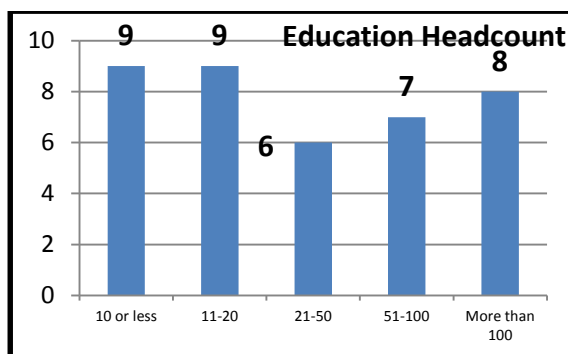
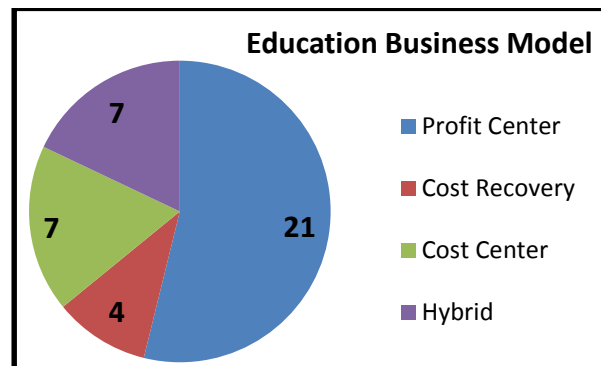
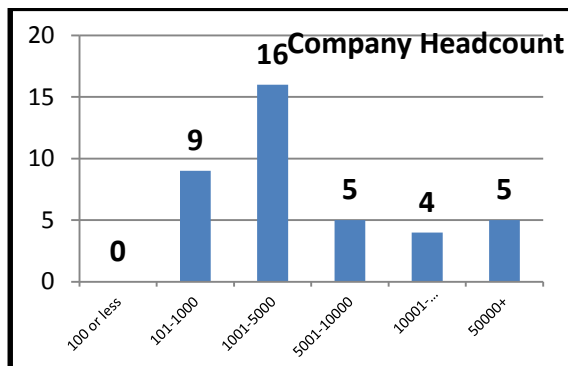
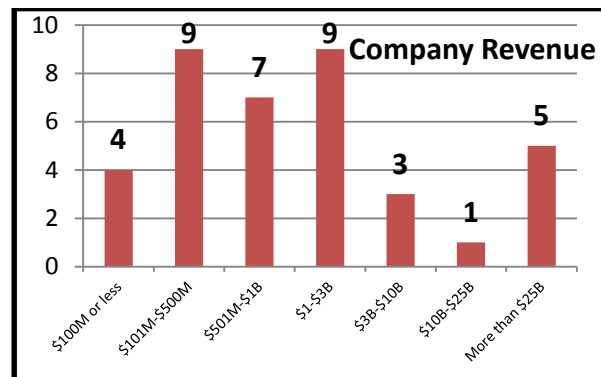
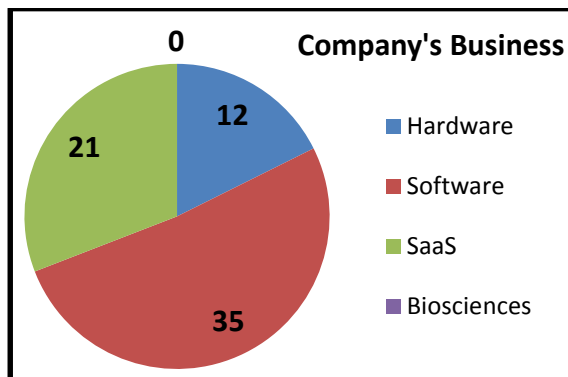


## CEdMA Training Market Barometer

### 2<sup>nd</sup> Quarter 2015 actual and forecast for 3<sup>rd</sup> Quarter 2015

#### Introduction

This report is compiled by CEdMA for its members about their Education businesses. It is based around a series of absolute growth or decline percentages in the range  $\pm 12.5\%$ . Revenue and volumes refer to training services delivered in the quarter and not future bookings. Members were asked to indicate whether their data was for the global business or that for North America. Note that in this report, u/f/d is the number of members reporting up/flat/down, respectively. There were 34 responses for global and only 5 for North America so the combined 39 profiles are as follows:



## Summary

The unweighted average uses all responses as entered, whereas the weighted average uses the size of the revenue, taking the relevant education value, so larger companies have a bigger impact. These observations are weighted and based on trendlines of 4-period moving averages, giving yearly changes.

**Revenue:** Grew just over 4% in the last four quarters

**Profit:** Grew 3% in the same period

**Live Classroom:** Volumes have increased 2% in the last four quarters, having risen from flat in 2013

**Virtual Classroom:** Volumes have increased 6-7% over the last four quarters, back from 3% in 2013. Live and virtual classroom data underline the expected trend to virtualize.

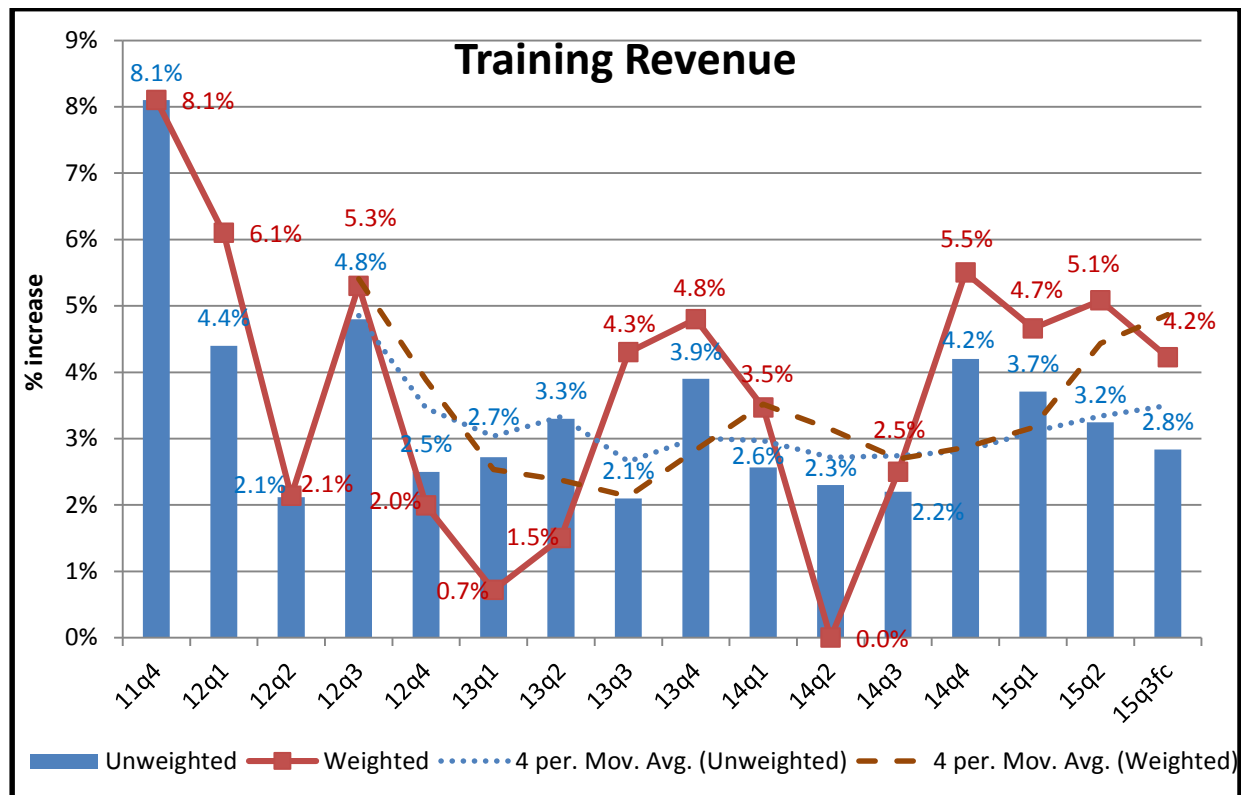
**Public versus Private:** Private class volumes grew 3% in the last year. Public class volumes grew 1%.

**E-Learning:** Volumes grew 8-9% in the last year, up from 5% before then.

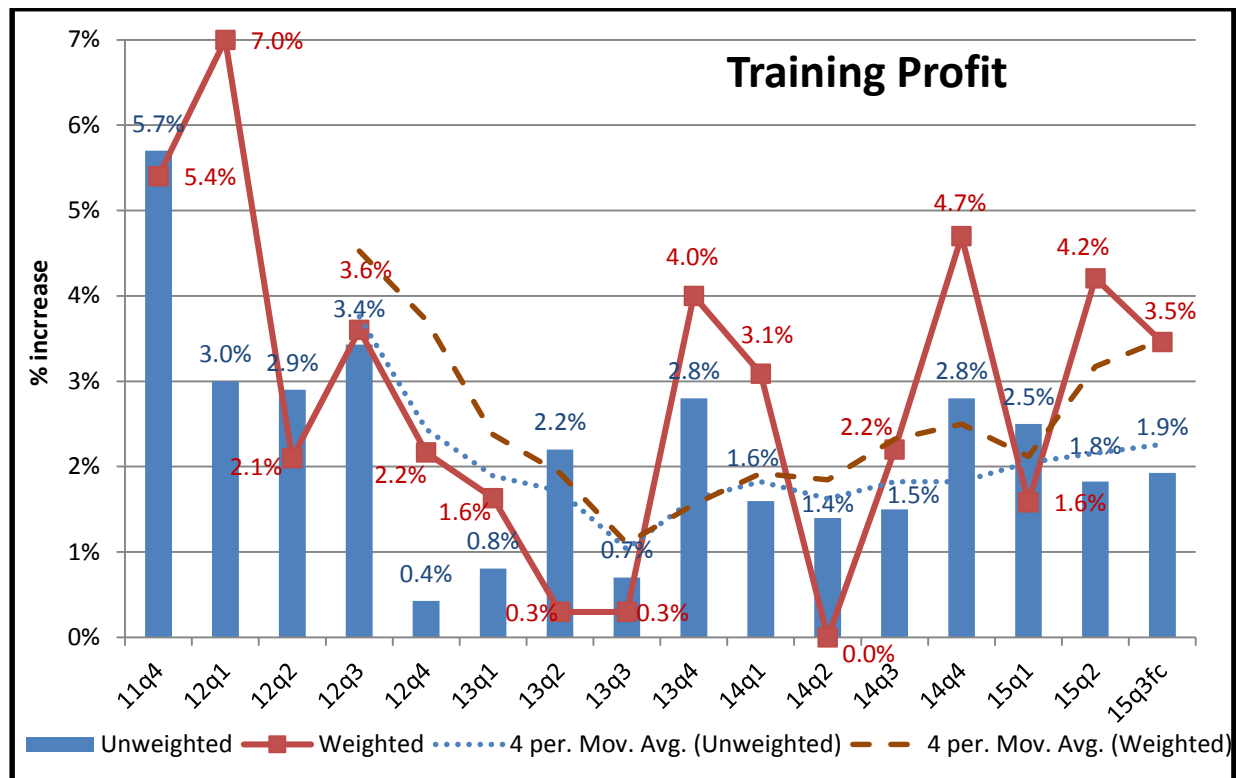
**Certification:** Is growing steadily at 5-6%, double from two years ago.

**Instructor Utilization:** Has shown over 4% increase over the last year, consistent with the increases in live and virtual volumes.

## Revenue and Profit



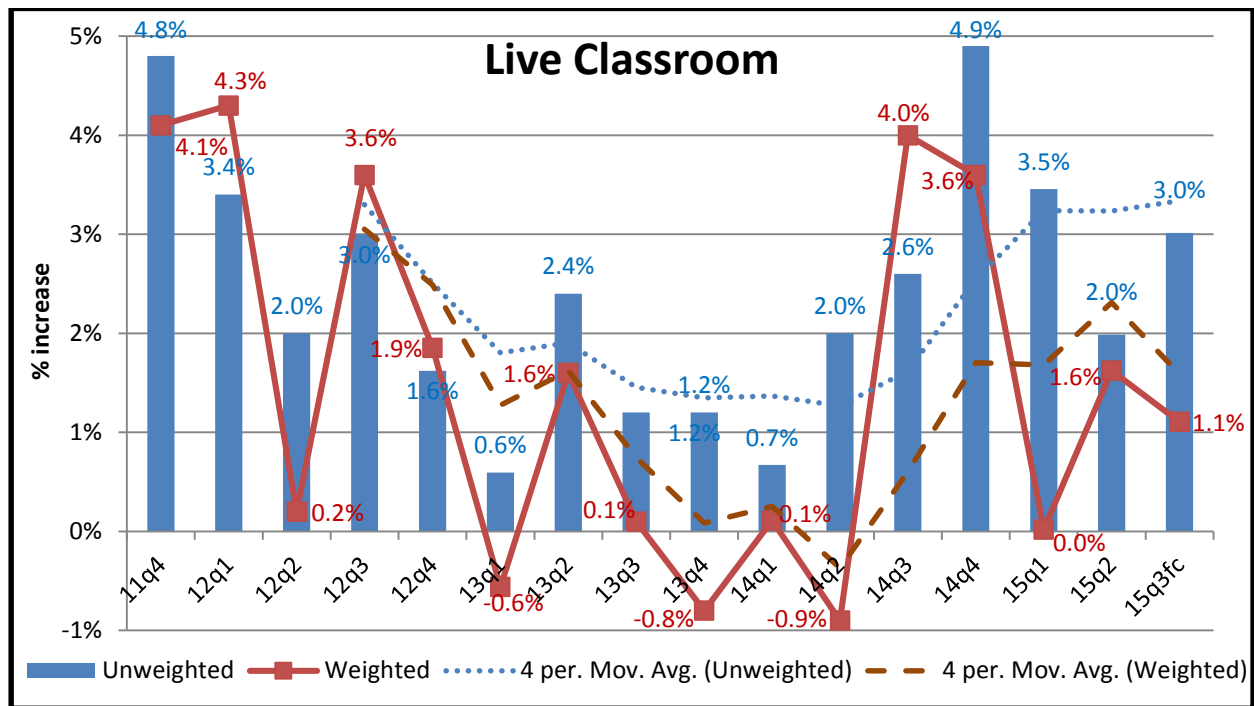
The unweighted total training revenue increase for 15Q2 (u=25, f=5, d=7) was 3.2% against a forecast in the last report of 3.1%. The weighted total training revenue increase was 5.1% against 5.2% forecast. The forecast for 15Q3 (u=20, f=7, d=10) is 2.8% unweighted and 4.2 % weighted, showing consistent growth. The 4-period moving average is currently showing an increase over 3% for unweighted and over 4% for weighted, trending upwards.



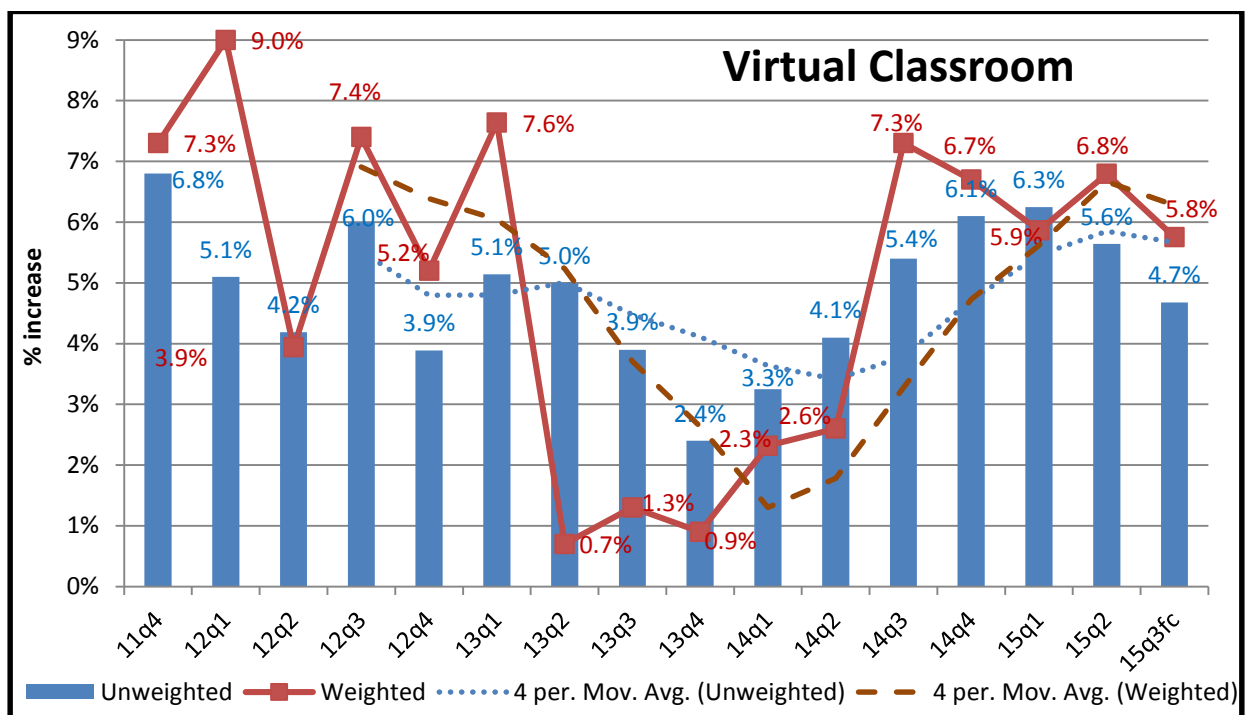
Training profit in 15Q2 (u=18, f=10, d=9) was a 1.8% increase against a forecast of 2.0% unweighted, and 4.2% against a forecast of 4.3% weighted. The 15Q3 forecasts (u=15, f=12, d=8) are 1.9% and 3.5% for unweighted and weighted, respectively. The training profit four-period trendlines currently show a 2-3% increase for both unweighted and weighted over the last two years and rising slightly.

## Activities (Customer and Partner Training)

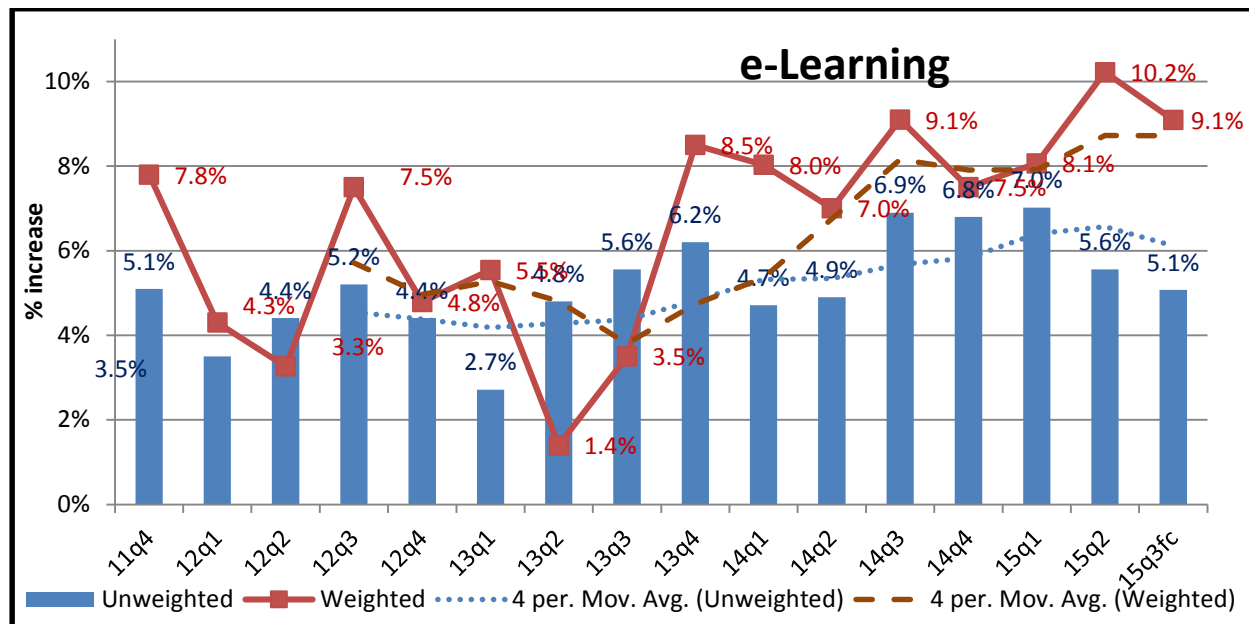
The unweighted live classroom volume increase for 15Q2 (u=19, f=8, d=12) was 2.0% against a forecast in the last report of 3.4%. The weighted live classroom volume increase was 1.6% against 2.0% forecast. The forecast for 15Q3 (u=22, f=8, d=9) is 3.0% unweighted and 1.1% weighted. Live classroom volume, however, is still increasing. The 4-period moving average has taken a swing upwards in the last 12 months and is now showing a 2% increase when weighted.



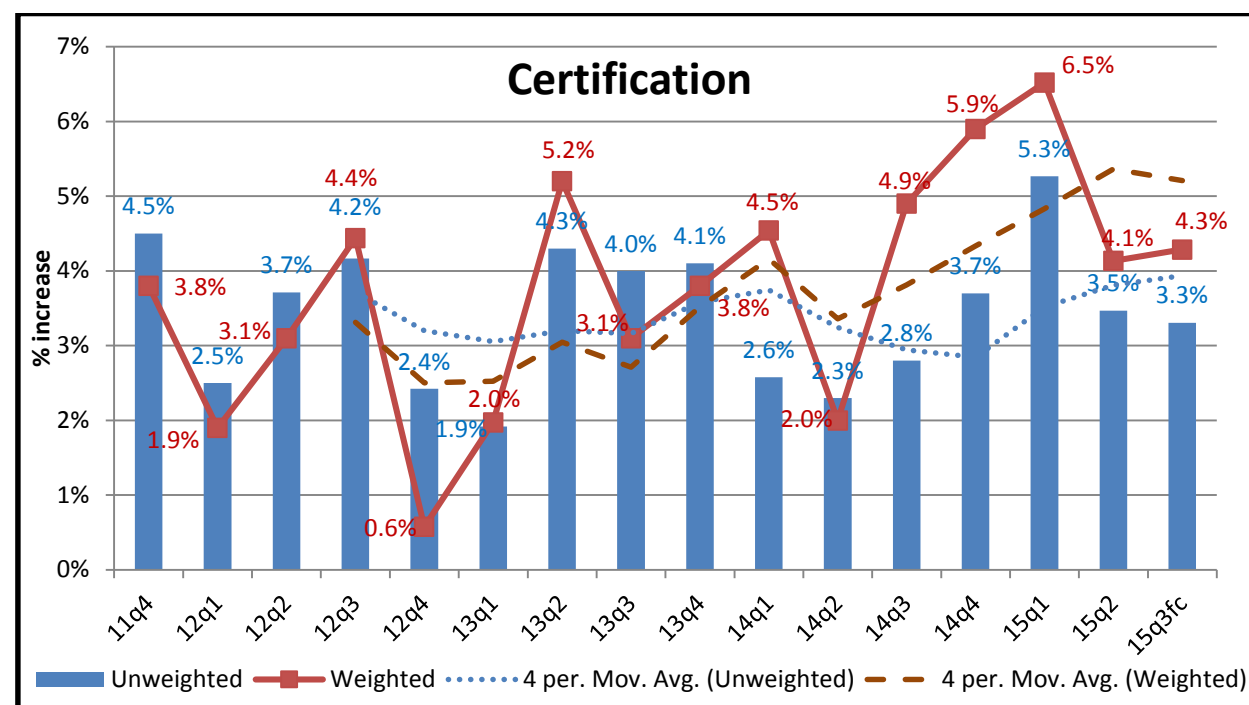
Virtual classroom on the other hand has been growing faster, apart from a small dip in 2013. The unweighted virtual classroom volume increase for 15Q2 (u=28, f=7, d=4) was 5.6% against a forecast in the last report of 3.9%. The weighted virtual classroom volume increase was 6.8% against 4.0% forecast. The 15Q3 forecasts (u=28, f=8, d=3) are 4.7% unweighted and 5.8% weighted, respectively. The 4-period moving averages for both unweighted and weighted have both risen to 6%. Live and virtual classroom data underline the expected trend to virtualize more training to save travel expenses and allow better resource utilization.



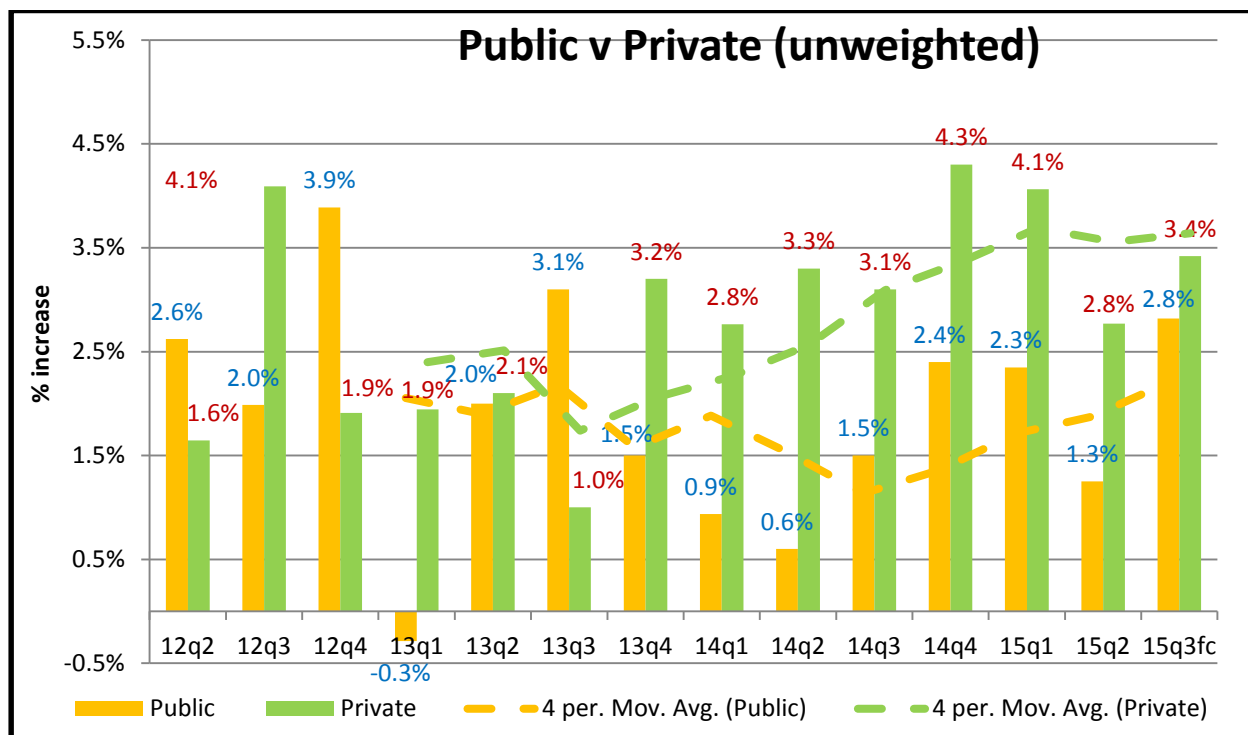
The unweighted e-Learning volume increase in 15Q2 (u=26, f=8, d=2) was 5.6% against a forecast in the last report of 6.6%. The weighted e-Learning volume increase was 10.2% against 8.4% forecast, showing a significant boost for all companies. The 15Q3 forecast (u=21, f=12, d=2) is 5.1% and 9.1% for unweighted and weighted, respectively. The growth over the total period has overtaken virtual classroom. The 4-period moving average shows a 6-7% increase for unweighted and 8-9% for weighted.



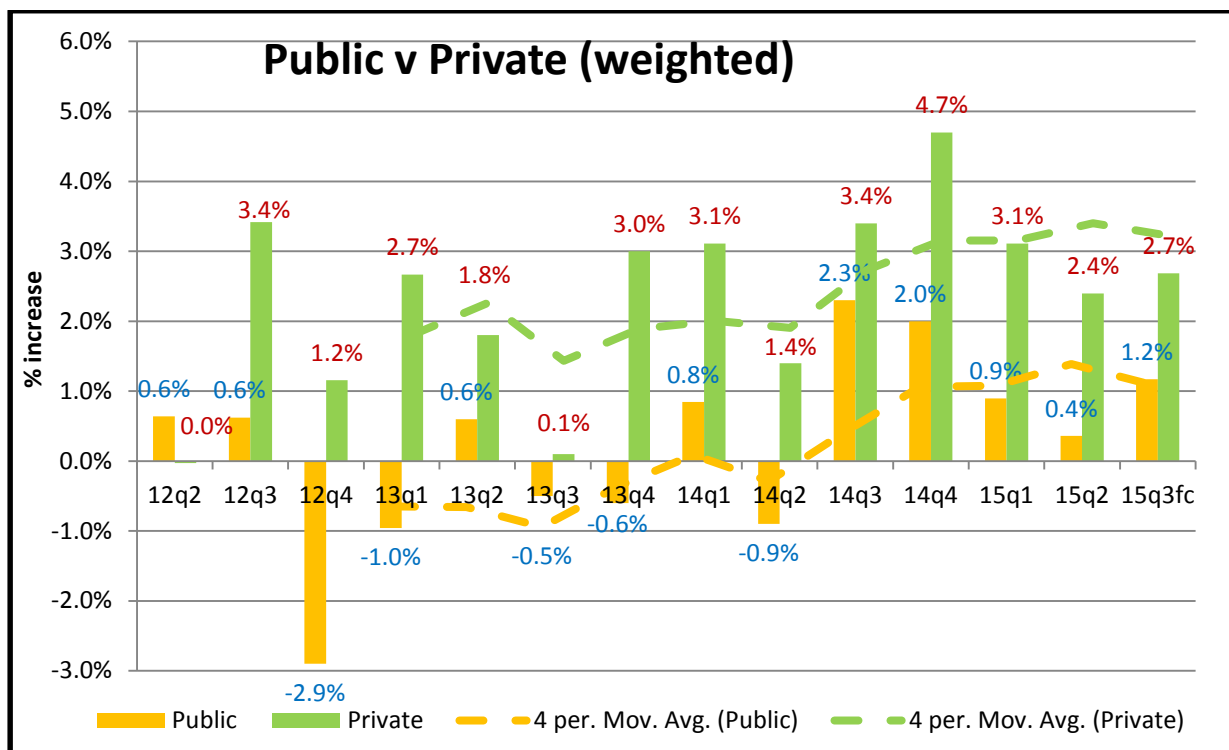
The unweighted certification volume increase for 15Q2 (u=17, f=12, d=2) was 3.5% against a forecast in the last report of 4.5%. The weighted certification volume increase was 4.1% against 5.9% forecast, quite a shift for larger companies. The forecast for 15Q3 (u=18, f=10, d=3) is 3.3% and 4.3% for unweighted and weighted, respectively. The 4-period moving average is showing increases of around 3-4% for unweighted and 5-6% for weighted.



We now include questions on public classes and private classes. After a “blip” in 13Q1, both volumes have increased in 15Q2, by 1.3% public and 2.8% private. The forecasts for 15Q3 are 2.8% and 3.4%, respectively. The trendline for public is almost 2%, but private shows well over 3%.

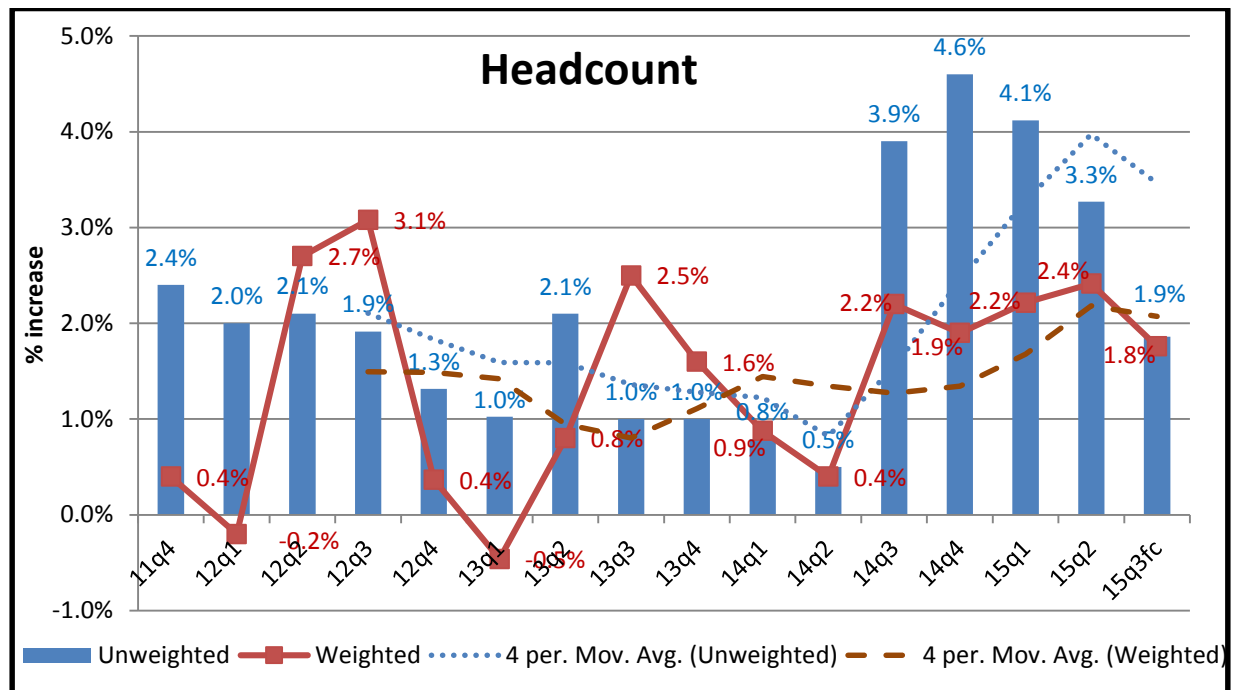


When weighting is taken into account, the changes are more dramatic. The 4-period moving average is 1% for public and over 3% increase for private. So, there's consistency with both unweighted and weighted trendlines.

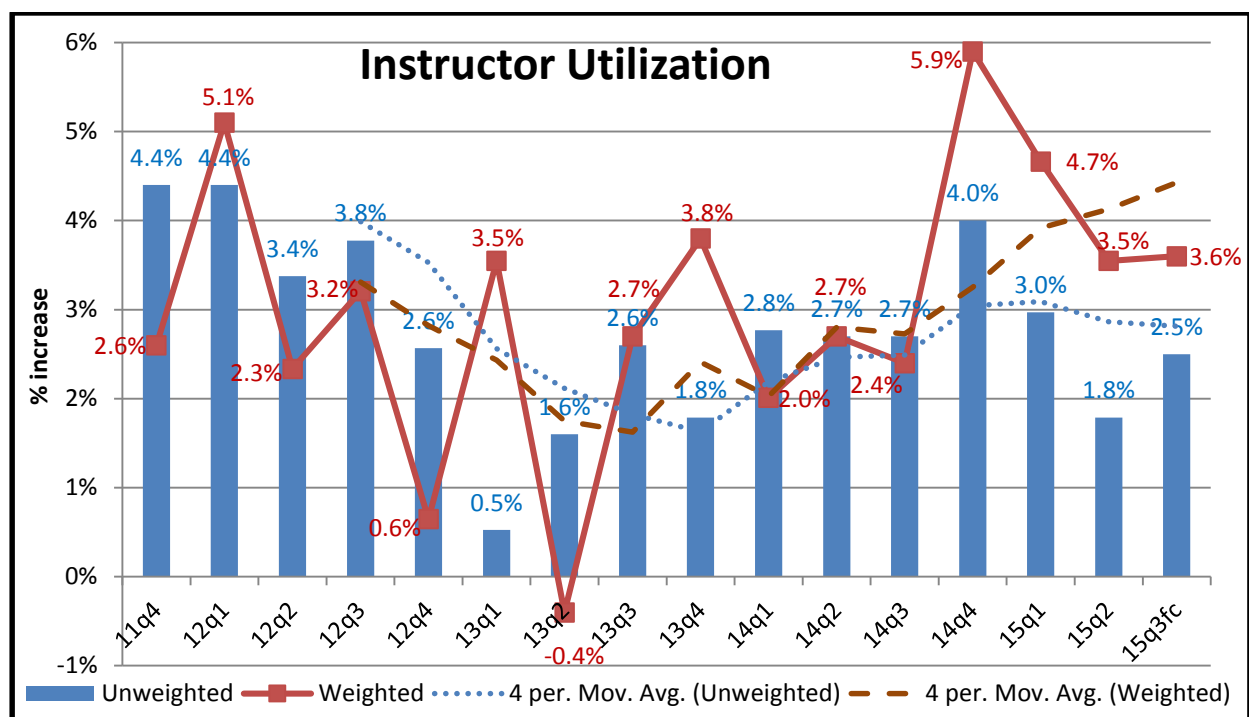


## Team

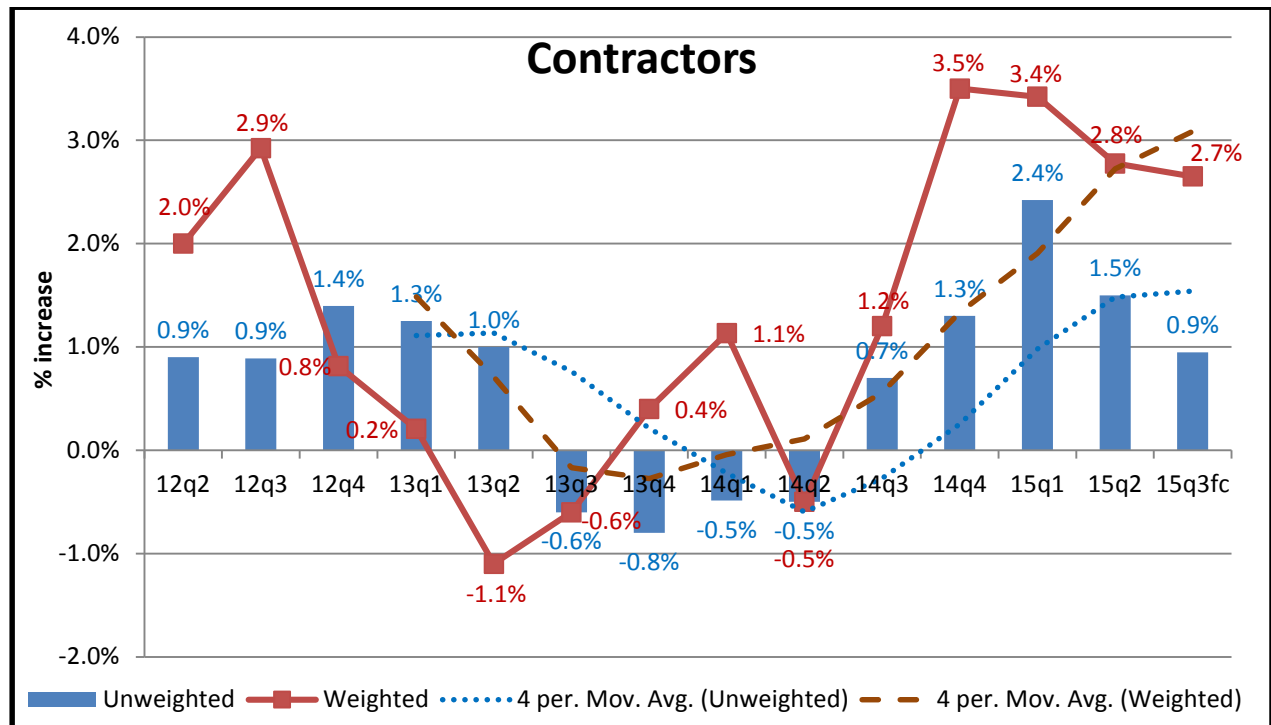
Unweighted headcount has largely remained constant over the whole period, with the weighted numbers showing more erratically. However, since 14Q3 there has been a spike upwards. The 4-period moving average currently shows increases around 4% for unweighted and 2% for weighted.



Maybe as a result of the small increase in hiring but higher increases in volumes for live and virtual delivery, the Instructor Utilization increases have shown a steady increase. The 4-period moving average currently shows an increase of 3% for unweighted and but 4% for weighted.



We also added a question on the use of contractors in 12Q2. While the results overall have been erratic, the trendlines show that both unweighted and weighted are now showing greater increases.



### Which subject areas saw the biggest increases in your training volumes in the last 3-6 months?

1. Administration, Finance
2. Developer Training
3. Online live virtual classroom and on-site classes
4. Customer skills
5. Strategic acquisitions, cloud and technology
6. eLearning courses much higher in demand, VILT increase in demand, private classes on the rise
7. Onboarding new hires who are supporting a brand new solution.
8. Security
9. Virtual ILT classes; On-site classes
10. User Adoption and Change Management services, virtual public training
11. Networking Virtualization - SDDC- SAN
12. Private Classes
13. Certification attempts
14. Self-paced eLearning; Dedicated classes
15. Basic product installation, configuration, management, some troubleshooting
16. Virtual classes
17. Sales training
18. Networking topics
19. New products and products with major releases



20. Identity workflow management.
21. SDN NFV Ethernet Fabrics
22. Field Enablement, Internal Employee Training
23. Internet of Things; Optimization; Best Practice
24. Seeing private class increases; Self-directed classes
25. Virtual instructor-led classes
26. eLearning/informal training; EMEA open enrollment training
27. Scheduled Course Registrations
28. The subject areas have remained fairly consistent.
29. We saw the biggest increase in our security products.
30. All
31. Core eLearning.

**Which subject areas saw the biggest decreases in your training volumes in the last 3-6 months?**

1. Year End/Platform
2. Instructor led public classes
3. None
4. Private customer classes decreased in Q4.
5. Decline
6. Industry topics
7. ILT courses much lower demand
8. Traditional solutions training (in lieu of new solutions).
9. Public training
10. Private at the customer site
11. vSphere- Virtualization Configuration - Product Overview
12. Same as before decrease in Public classes, however we will be adjusting to provide and encourage more students to take public classes.
13. Classroom/Private based training.
14. Public classes
15. More advanced/specialty courses
16. Traditional (instructor-led) training
17. None
18. Legacy operating systems
19. Products with no updates, patches, etc.
20. No identifiable drops.
21. Layer 4-7
22. Partner Resellers
23. Basic training where the market is saturated
24. Public classes
25. Americas private classes are down a bit
26. Account Specific
27. The subject areas have remained fairly consistent.
28. Our older products
29. Private Training

- 30. None
- 31. Instructor Led Online

**What were the two greatest challenges you faced in running your business in the last 3-6 months?**

- 1. Hiring talent; Meeting growth targets; Building the organization to support future growth.
- 2. After training credit sales, no one "owns" the burn down - causing rev rec delay; Pricing Pressure from competition/grey market
- 3. filling seats; larger revenue number set by executive level
- 4. Keeping up with rapid product changes; Introducing new training and certification products.
- 5. Localization and Regionalization of content; Manager Training Program; Certification
- 6. Organizational shifts accompanied by changing priorities
- 7. Overhauling our courseware to accommodate the new primary BI development tool, which unfortunately had significant product issues resulting in substantial course reworking. Creating Webinar based training classes
- 8. Balancing "for-free" self-help content and "for fee training content offerings. Measuring leveraged use of training content
- 9. Creating an efficient back-end operation for our learning platform; Usability of our learning platform
- 10. Maintaining and updating training curricula
- 11. Continuing to integrate two internal training groups, and being seriously under-resourced.
- 12. Keeping the team morale up when the company is going through restructuring activities. As a consequence for the restructuring activities, trying to keep up with course development work, when less resources available but company is renewing its portfolio.
- 13. Customers less willing to attend multi-day classes, want shorter classes with very targeted agendas
- 14. System limitations (LMS) - Data integrity/integration
- 15. Scalable processes to accommodate hyper growth; Competing challenges with Free content and for fee learning programs
- 16. Reduced Backlog causing fall in fill rates in classes and deferred revenue to draw from. Lackluster license sales driving new training business (and private classes).
- 17. Need to modularize our classes to make them more applicable to our users; Need to implement LMS
- 18. Keeping pace with rapid growth of the company/demand; Changing certification exam center provider
- 19. The company redesigned their web site and it went live before some significant issues were fixed. It took months to resolve them and I'm certain we lost customers during this period; How to maximize our impact to the company
- 20. Cost associated with face-to-face training; How to successfully implement micro online courses
- 21. Decline in product sales, thus fewer deals to attach to; Consulting organizations trying to poach all informal, and some formal, training business.
- 22. Evolving business and portfolio strategies
- 23. Engaging a rapidly growing non-training salesforce.
- 24. Current infrastructure does not support needs of business; Acquisition of new technologies/companies with little or no course material available
- 25. Too many concurrent projects - all important; Limited resources and time
- 26. Downturn in the US market just being covered by growth in EMEA and APAC
- 27. Systems/Automation; Software Company Change.

28. ATP revenue smaller, eLearning growth, and ILT decline
29. Hiring good quality talent in the Bay Area
30. Belt tightening at some of our larger customers. Love from account teams!
31. Actively transitioning a formerly all training sales team to a user advocacy function and this modification has created some challenges during the process of transition. With this change the training conversations have to begin to shift back to the named account representatives in Corporate (outside) accounts and to potentially several sales representatives as our inside sales teams have transitioned to product-specific tasks per rep whereby any one of several reps of could be having a training conversation. It's going to take some additional time to work through this change internally.
32. Creating scalable business process and practices to accommodate the growth. Managing expectations for free/discounted training.
33. Keeping instructors up-to-date as we release updated classes to meet our rapid releases.
34. Budget issues for customers in select verticals leading to cut in discretionary spending such as training. Customers receiving free of charge training from other departments
35. Public attendance; Systems and Infrastructure

**Please add any other comments or observations you have on the state of the IT Training market**

1. Technology is evolving rapidly, making it difficult to keep materials current
2. Students attending online training are not prepared. They wait until last minute to do the pre-test of connection and sound and then are not experienced in using multiple monitors or don't have multiple monitors.
3. End user training seems variable - we see up and down interest from quarter to quarter.
4. Q2 showed a significant increase in ILT worldwide. eLearning also increased substantially.
5. At my company, there is a grass roots effort to develop short YouTube-style videos for the masses. There is a lot of passion around this and the feeling here that this is the wave of the future for training. The challenge is how this fits in with our traditional training offerings.
6. Trend away from multi-day in-classroom training is accelerating. Customers expect shorter and online training.
7. Good business in niche markets where the training is tied to product sales.
8. Seeing an increased demand in new IP training related to third platform (mobile) technologies -> programming, scripting, orchestration, virtualization, etc.
9. Subscription model impact - changes rev rec practices...fight for a % in overall subscription pricing
10. Seems like other software are seeing soft revenue and bookings as well for companies that remain with low single digit software sales. Those with high growth continue to show strong balance for education.
11. Subscriptions are the way to go
12. Automation and cloud/SDN starting to change the profile of learners; growing need for programming skills in addition to operational skills. RFPs in Europe are picking up!