Department of Surgery

Enhancing Resident Education by Empowering the Learner Through the Creation of Smartphone Applications

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Introduction: The classic paradigm of medical training consists of resident education using source material produced by faculty subject matter experts. Newly emerging modalities for resident education include mobile educational applications (Apps), viewable on portable tablets or smartphones. Apps can be created, edited and revised quickly as compared to traditional printed sources. We have exploited this advantage by involving residents in the real-time development of several educational applications. Residents were surveyed about educational content and their satisfaction of the residents in the development process.
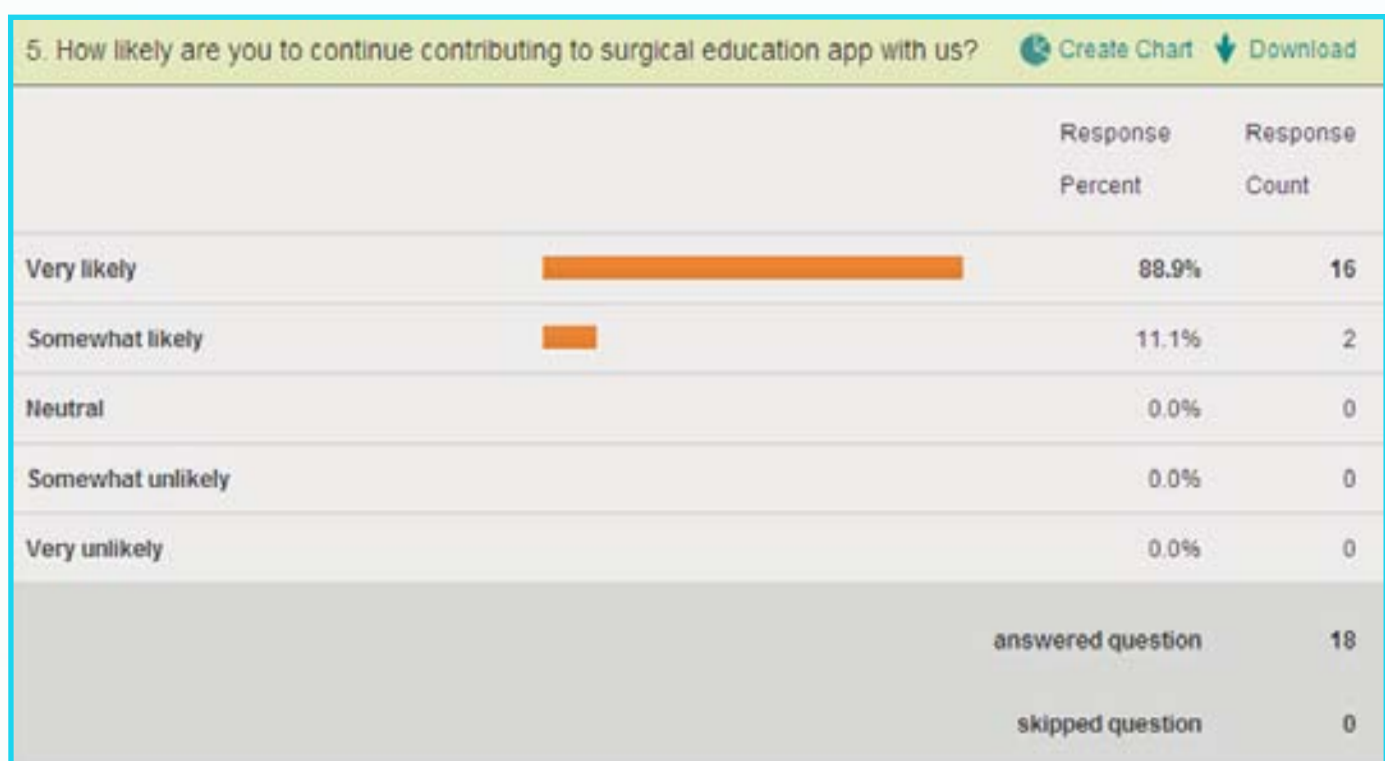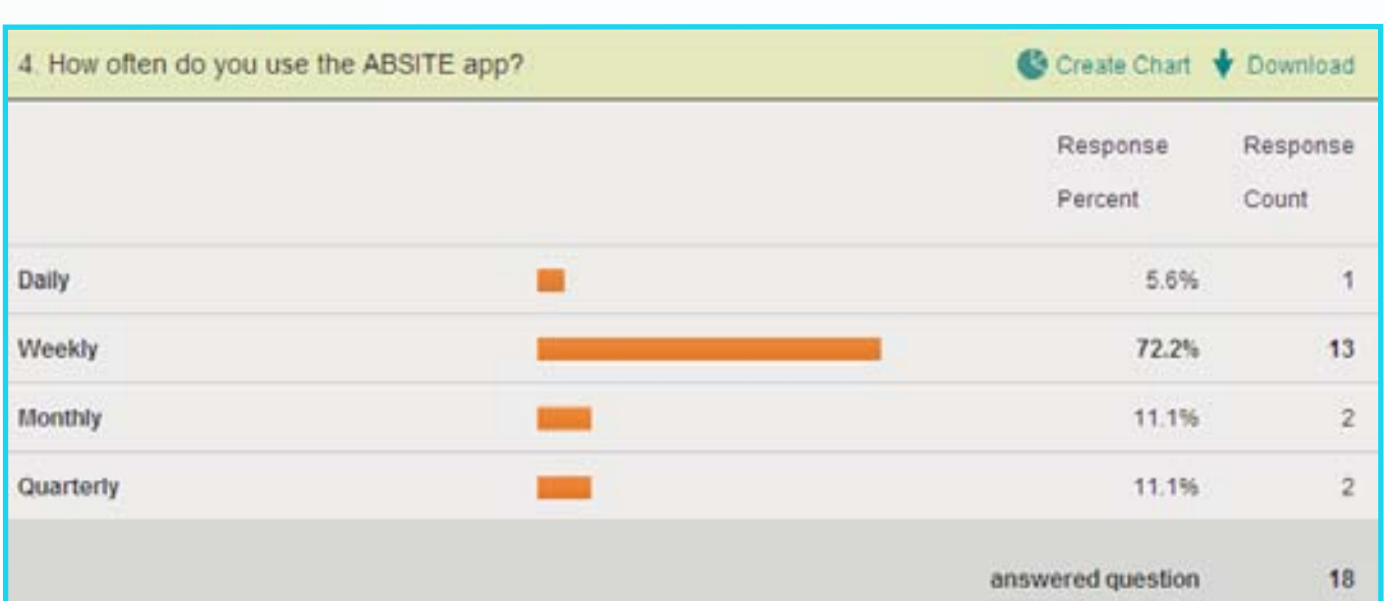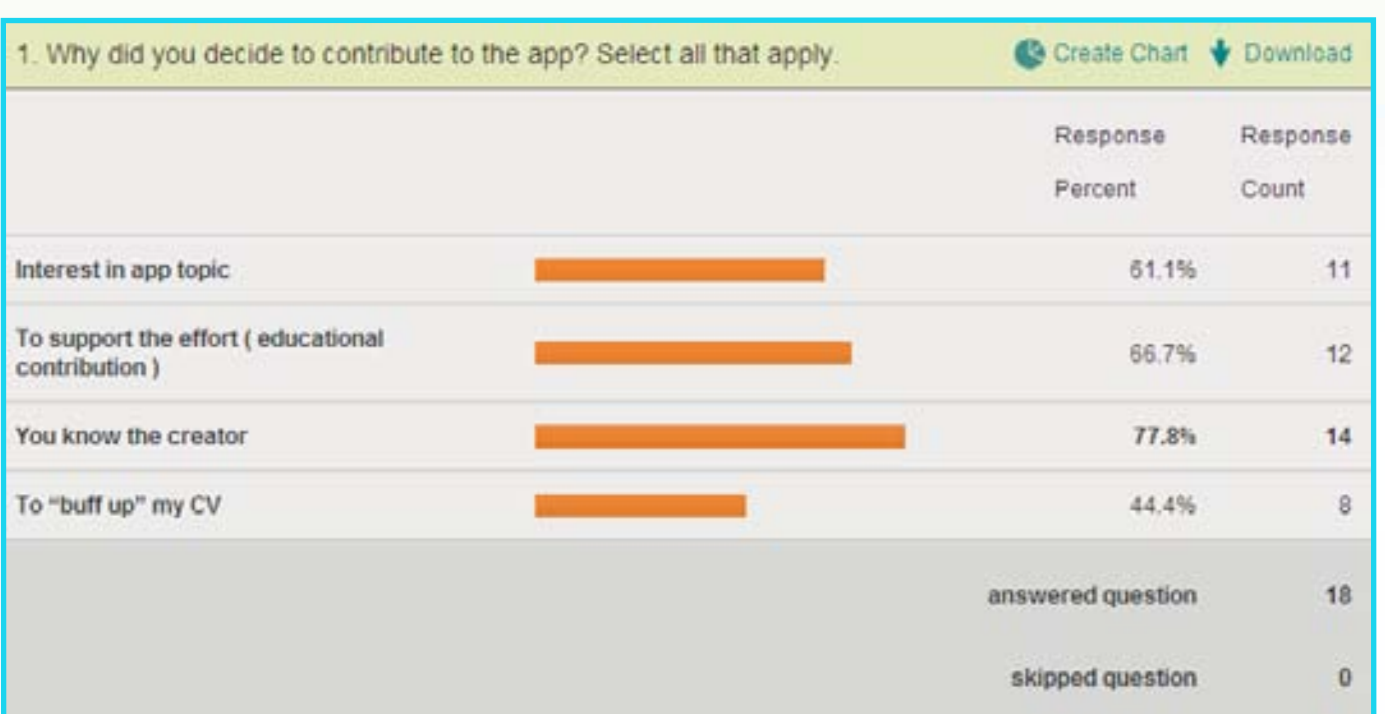
Methods: A multi-institutional Apps development team was assembled consisting of 26 residents from five residency programs. After the Apps were developed these residents were surveyed on their role in the development process. A second survey was placed within the App so the end user could give feedback on the educational and clinical value of the App.

Results: Over a four month period two Apps were developed with the resident development team. These two Apps consisted of an ABSITE quiz and an Endoscopic atlas. 62% responded to the survey. 100% of the respondents were satisfied with the App. 68% use the Apps on a weekly basis, 12.5% monthly, 12.5% quarterly and 6.3% daily. 87.5 % of the residents are very likely to continue contributing to surgical education Apps.
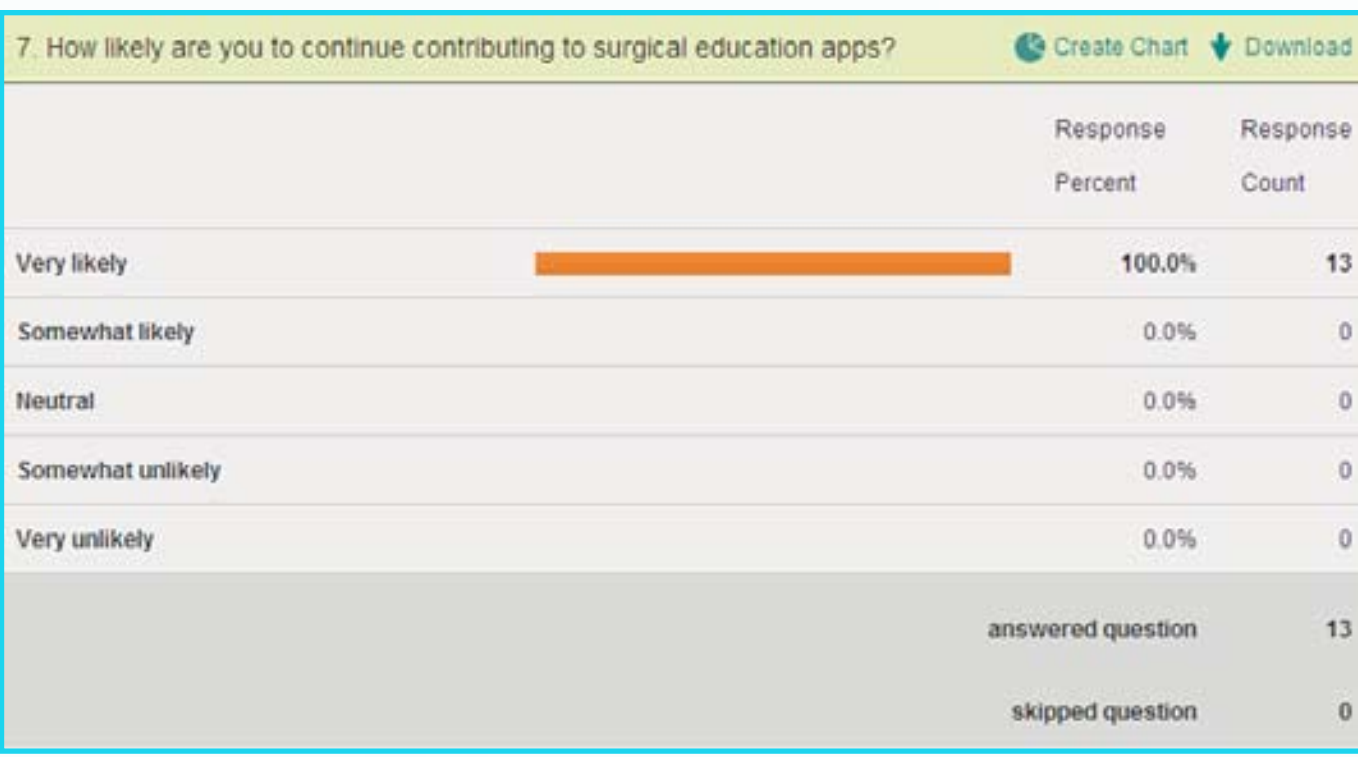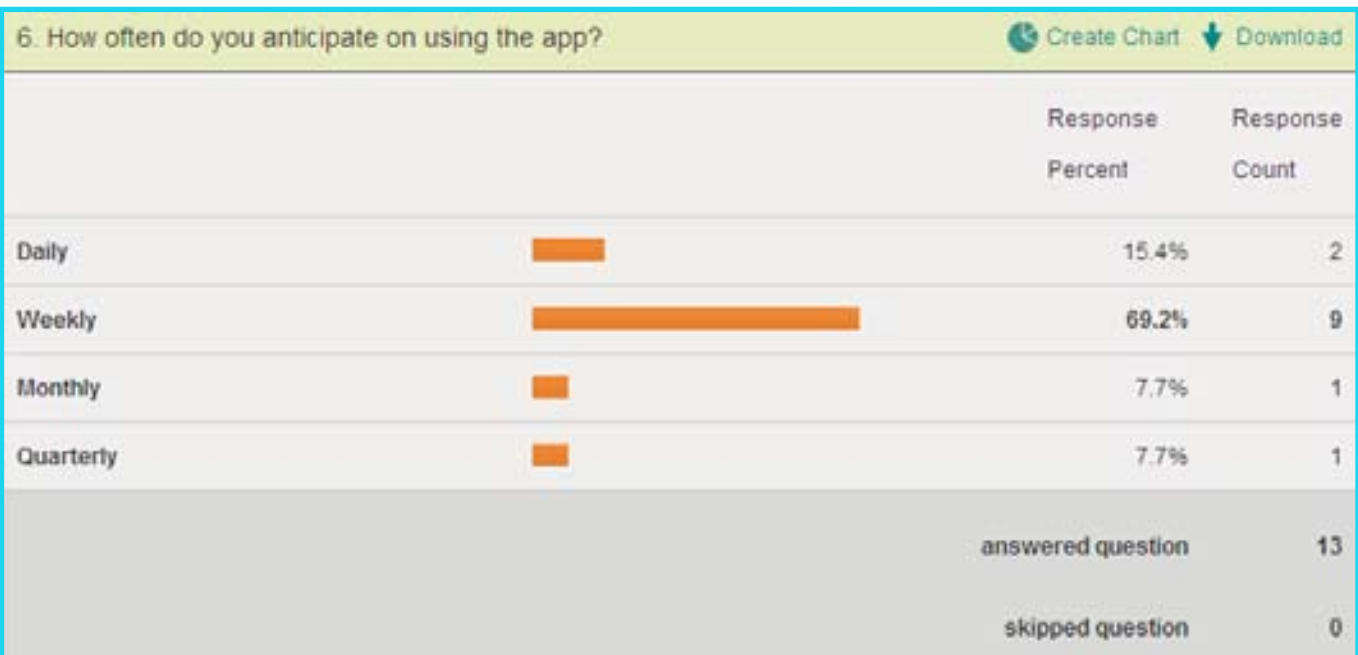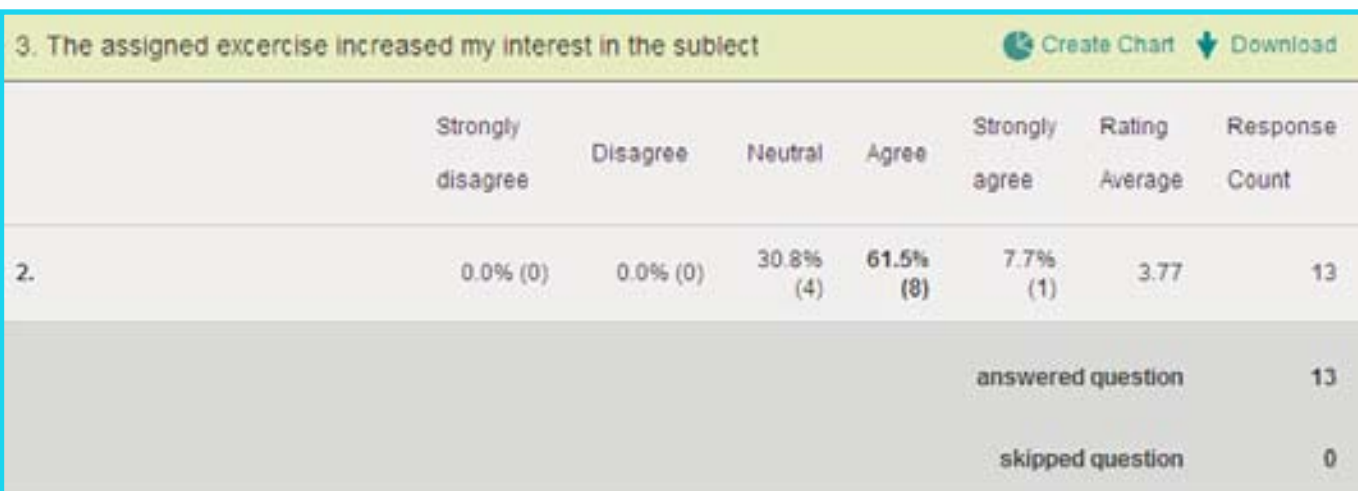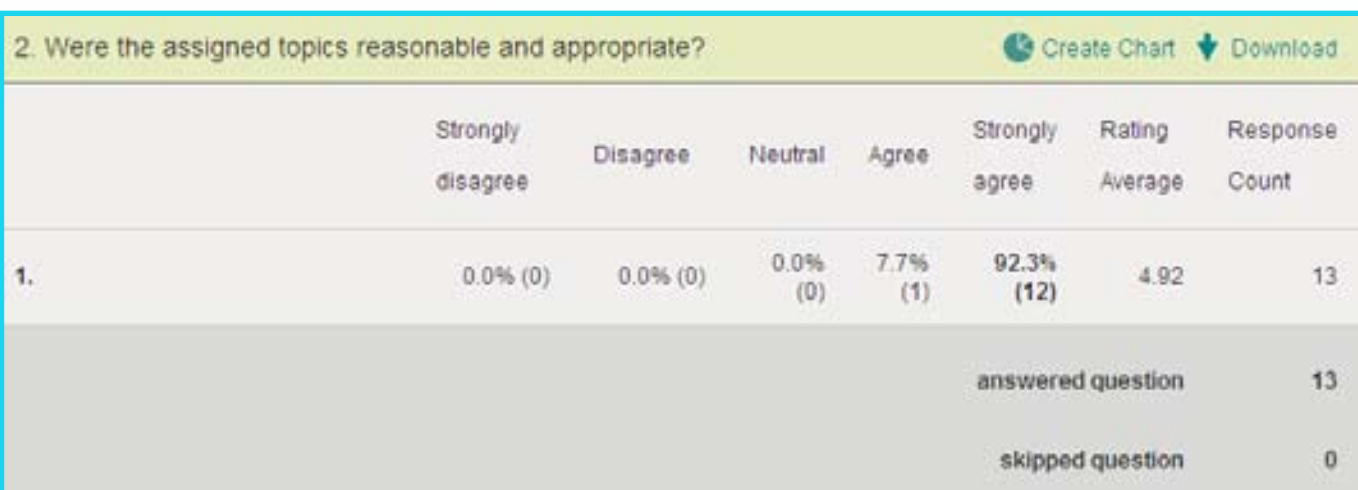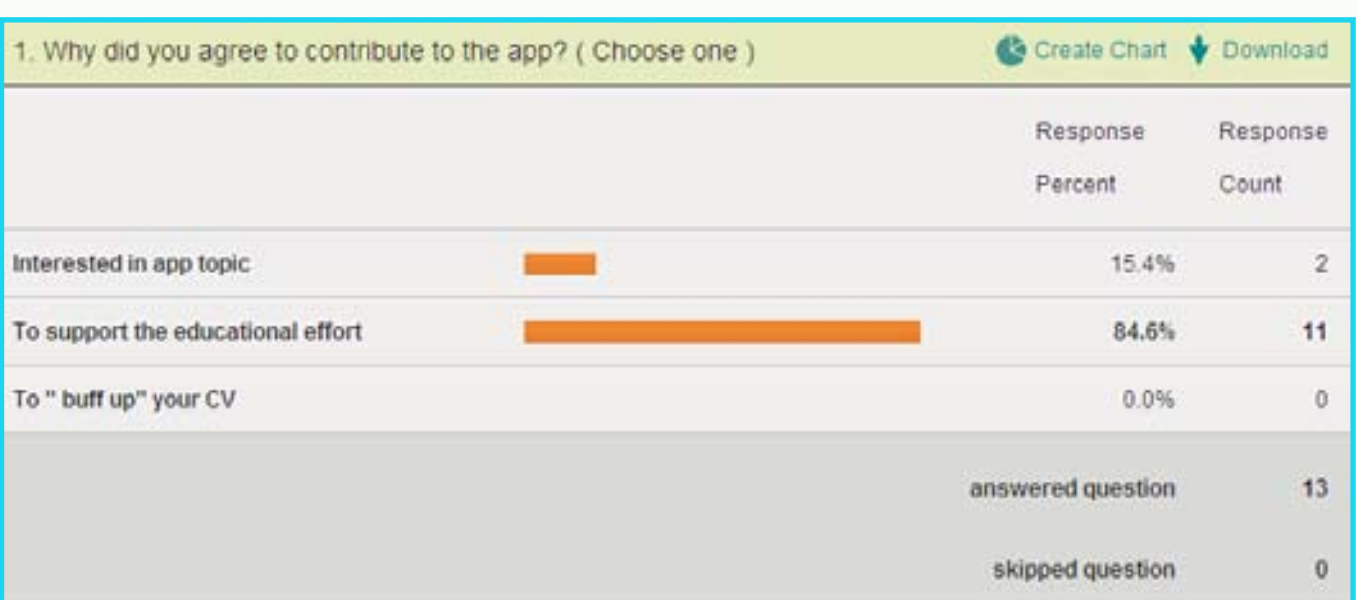
Twenty eight residents responded to the survey contained within the Apps. Over half felt they had gained a great deal of knowledge. An overwhelming 93% of the respondents felt that the Apps were clinically relevant, and 61% gave the Apps an overall rating of "excellent." All of the respondents indicated that they would recommend the App to someone else.

Conclusion: New technologies allow for the development of a completely new format and process for resident education. Residents can now be active participants in real time curriculum development and improvement rather than passive learners. Educational content of resident developed apps appears to meet learning requirements as judged by the residents themselves.

SURVEY 1

SURVEY 2

OTHER IMAGES

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